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UNIVERSITY OF ALBERTA

PATIENT EXPERIENCES WITH SEASONAL AFFECTIVE DISORDERS

BY

NATALIA ROOB

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the requirements to the degree of Master of Education.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

Edmonton, Alberta

Fall, 1992

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THE UNDERSIGNED CERTIFY THAT THEY HAVE READ, AND RECOMMEND TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH FOR ACCEPTANCE, A THESIS ENTITLED "Patient experiences with seasonal affective disorders" SUBMITTED BY NATALIA ROOB IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION IN EDUCATIONAL PSYCHOLOGY.

J.G. Paterson
Dr. John G. Paterson
Supervisor

Dr. H.L. Janzen

C.A. Blashko
Dr. C.A. Blashko

Donald M. Richards
Dr. D. Richards

DATE July, 1992.

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....
(Student's Signature)

P. O. Box 1290
Gibbons, Alberta
T0A 1N0
(Student's permanent address)

Date: ....

Abstract

The purpose of this study was to gain more insight into the every day live experiences of people suffering from Seasonal Affective Disorder (SAD). To gain this insight the phenomenological method of research was used. Four women, identified as sufferers with SAD and participants in a SAD research study were interviewed. Each woman was interviewed for three hours, and from the transcripts of the interviews significant themes with respect to the original question of this study, "What is the everyday experience for a married client diagnosed with SAD" were clustered into higher order of themes.

The findings show that sufferers with SAD had idiosyncratic histories which compounded the problems of identifying general themes in response to the original question. However, it was shown that physical and mental health, concept of self, and relationships with family and helping professionals was negatively affected. Their difficulties led to them quitting their jobs, eagerly search for a solution to their depression, marital strife and psychosomatic problems. Some reported hypersensitivity to drugs, food or environmental factors.

Following light therapy, some important findings were recorded, though degree of recovery from SAD varied. The patients who had more anxiety or psychosomatic problems showed less qualitative improvement following light treatment. Despite the idiosyncratic history of each patient some tentative implications can be made.

Prior to a general treatment plan using light treatment individual attention should be made to identify some of the idiosyncratic factors that may negatively interfer with outcome (smoking, marital relationship, consumption of caffeine, misuse of medication). Self-support groups (and spousal support groups) in addition to light treatment may contribute to a greater level of recovery.

Finally, the importance of developing a positive patient/physician relationship is strongly advocated. Empowering these patients with positive self-talk, intervening with some concrete supports (flowers, bright apparel) will enhance the recovery.

Further research using larger samples, longitudinal studies, and interviews with other family members of the affected patient will contribute to furthering our understanding of this recently identified condition known as SAD.

Dedication

This research is dedicated to all co-researchers
who shared their experiences with me
and to those who helped me in the
completion of this thesis

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I. INTRODUCTION

Background to the Study

> Whoever wishes to pursue the science of medicine in a direct manner must first investigate the seasons of the year and what occurs in them.
>
> Hippocrates, 400 B.C.

A relationship between the seasons, light and a person's mood has long been recognized and described. Since the time of Hippocrates, physicians recognized the beneficial effect of light on depressed patients. Greek and Roman physicians conceived of depression as a kind of internal darkness (Wehr, 1989). Posidonius, in the fourth century A.D. summarized in his writing the views of many ancient physicians with regard to affective illness and he pointed out that "Melancholy occurs in autumn, whereas mania in summer" (Wehr, 1989).

In the last centuries however, most theories of the pathogenesis of affective illnesses focused on psychological and biochemical mechanisms and the role of physical environment was somehow neglected. Early in the twentieth century Kraepelin recognized that some form of affective illnesses have seasonal character. He was the first psychiatrist who pointed out that five percent of all patients with manic-depressive illness had seasonal disorders. During the same period, Pilcz published histories of patients with recurrent winter depression (Rosenthal & Blehar, 1989).

Light and its effect on one's health was serendipitously reported during an Arctic expedition later in that same century. In 1898, a ship's physician, Frederick Cook, made the observation that there was a possible connection between light deficiency and depression. He noted that members of the expedition were afflicted with "languor" during the winter's darkness and that they were relieved by bright artificial light (Rosenthal, 1989).

It was not until 1980 that a more scientific approach with seasonal forms of affective illness was undertaken. H. Kern, a patient with a history of winter depression, was successfully treated by artificial light therapy in the first of A.J. Lewy's experimental research studies at the National Institute of Mental Health (NIMH), Betheseda, (Lewy, 1990). It was during that same year that winter depression was recognized as a distinct entity. Since then, many controlled phototherapy studies have been conducted in Switzerland, England, Scandinavia, Australia, and the United States. In the spring of 1987, the American Psychiatric Association recognized a version of this depression labelling it Seasonal Affective Disorder (SAD) in its diagnostic manual, DSM-III-R.

SAD is the term that describes a condition characterized by regular depressions in the fall and winter alternating with nondepressed periods in the spring and summer (in G.C. Brainard's article 1990, Rosenthal et al., 1984). Onset of the illness typically occurs at age twenty and 83% of the patients are women. Their depressive states have been described as mild to moderate, although severe melancholia has been reported (Morin, 1990). Rosenthal estimated that 6% of SAD patients required hospitalization and 1% electroconvulsive therapy (Morin, 1990). A majority of patients with SAD report the following cluster of negative disturbances: hypersomnia and fatigue during daily hours, irritability, anxiety and hyperphagia with carbohydrate craving and consequent weight gain. Other common nonspecific symptoms reported by many sufferers are decreased libido, decreased capacity for working and socializing, as well as premenstrual difficulties. Recent studies have shown that 70-85% of patients with SAD have bipolar I or bipolar II diagnosis, and 70% of them report a family history of major affective disorder (Morin, 1990).

The most significant characteristic of SAD is a dramatic response to phototherapy as measured by significant reduction in outcome measures such as the Hamilton Depression Rating Scale (HAM-D) scores. The response rate over a number of studies approaches more than 60% with phototherapy, compared to 20% response seen with control light treatment (Lam, 1989). Estimated prevalence of SAD varies depending on the geographic latitude. Studies completed in several different parts of the United States demonstrate that SAD is more common among people who reside in a more northerly latitude (Rosenthal, 1987). It is estimated that in the Province of Alberta roughly 10.2% of the population may suffer from SAD (Rosenthal, 1989). Many SAD sufferers are disturbed by their symptoms in their everyday life performance.

On the other hand, it is estimated that as much as 20% of the normal population complains of moderate to marked changes in mood and in energy levels across the seasons with winter being the most difficult time (Jacobsen, Wehr, Sack, James, Rosenthal, 1987).

Research Question

This study is designed to provide a greater understanding of the patient's everyday life experiences with respect to SAD - Seasonal Affective Disorder. The author was guided by the following question: What is the everyday lived experience for a married client diagnosed with SAD? In answering that question, this author hopes to arrive at a deeper understanding of the patients who suffer from this disorder. I want to identify, through interviews, those experiences that my co-researchers had lived through. In listening to them, I shared their difficult journey with SAD. My intention is to interpret these journeys from the co-researcher's point of view. In this way I am hoping to find a common essence or structure to their experiences. It is my hope that this structure could be seen in the stories of other patients diagnosed with SAD. Since SAD was recently identified as a separate disorder, many health professionals are not familiar with the experiences patients have had to go through in their depressive episodes. The goal is to bring more light into understanding the SAD patients' experiences with respect to their family life.

Overview

This is a phenomenological study, following principles originally founded and developed by Edmund Husserl (1858-1938). According to him, phenomenology is a method which allows us to contact phenomena as we actually live them out and experience them. (Waller, 1975).

This study is a descriptive study and is designed to investigate experiences of sufferers with SAD in their everyday family life.

This phenomenological perspective is more related to human science than to the natural science tradition. In Chapter II a summary of the literature on traditional natural science research is reviewed with attention paid to depressive disorders with a review of the psychological research studies on depression in family situations.

In Chapter III the writer describes the participants and outlines the phenomenological procedures used to collect and analyze the data and present the findings of this study.

In Chapter IV both the findings and a discussion of the study are presented. The idea here is to obtain the most important themes emerging from the protocol. These themes are discussed in relationship to the original question posed in the study: "What is the everyday lived experience for a married client diagnosed with SAD?" and with respect to the literature reviewed in Chapter II.

In Chapter V the theoretical and practical implications of the study are discussed. It is anticipated that study findings will be added to the ongoing body of research exploring SAD and will contribute to clarification of major difficulties of sufferers with SAD in their everyday family life.

Purpose of the Study

1. To know SAD from identified patients' point of view and to interpret the impact of the disorder on one's family life.
2. To complement medical research and to contribute to a better understanding of this condition in order to improve communication in physician-patient relationship, family and other

surroundings where SAD is involved.

3. To identify factors that might affect the course of the disorder.
4. To use the research study as a tool for further research.

Limitations and Delimitations of This Study

In this study the main focus will be directed to the understanding of the lived experiences of sufferers with SAD as they relate to their everyday family situation. While the finding of this phenomenological study might help to produce some empathic generalizations rather than statistical there are some limitations and delimitations of this study which include:

1. A small sample of co-researchers will be used in this study and it will be represented by a relatively homogenous group (four women).
2. All interviews will be conducted during the Spring and Summer season. A somewhat changed perception of SAD as it relates to the other seasons other than Winter has to be considered.
3. One interview of each co-researcher is to be conducted and no family members participated in

this study.

The following are some delimitations of this study.

1. Since all co-researchers have used light therapy in a previous winter season no SAD experiences of co-researchers without using a light therapy will be recorded
2. Except for audiotape, no additional instruments were used. The use of videotape may have provided additional information that could lead to more insight into this condition and amplify the findings.
3. All c-oresearchers were presently living in the same geographical area. Their native language was English, except for one whose first language was Spanish.

Definition of Terms

Some terms used in the following chapters are of a medical nature and are defined in the following pages.

1. Cortisol: The major natural glucocorticoid (hormone) elaborated by human adrenal cortex.
2. Corticotrophin Releasing Factor (CRF): Hormone of the diencephalon (hypothalamus and thalamus) that

stimulates production of adrenocorticotrophic (ACTH) hormone from the anteriod pituitary gland.

3. Melatonin: A hormone synthesized by the pineal gland in the brain. It is secreted at a rate inversely dependent on environmental lighting. It is synthesized and released in response to norepinephin whose rate of release in turn declines when light activates retinal photoreceptor.
4. Prolactin: One of the hormones of the anterior pituitary gland that stimulates and sustains lactation.
5. Serotonin: Central neurotransmitter. It is produced enzymatically from tryptophan (protein aminoacid). It is a precursor of melatonin.
6. Thyrotropin Releasing Factor (TRF): Hormone which is elaborated by the hypothalamus and stimulates release of thyrotropin (hormone) from the anterior pituitary gland.
7. Bipolar Affective Disorders: Describes patients who had experienced both phases (depression and mania) in their course of illness. Furthermore, in the American literature (Dunner et al., 1970)

Bipolar I patients include those who have suffered from clear-cut episodes of mania and depression. Bipolar II patients comprise those who have received medical attention for episodes of depression and have a history of short episodes of hypomania.

8. Circadian: Pertaining to a period of about 24 hours, and applied especially to the rhythmic repetition of certain phenomena in living organisms at about the same time each day (circadian rhythm).
9. Unipolar Affective Disorder: Describes patients who had suffered from one or more episodes of depression without having any history of mania.
10. Anterograde memory: Concerns information learned after a traumatic event.
11. Retrograde memory: Concerns information learned prior to a traumatic event.
12. Rapid eye movement (REM): Sleep activity refers to a phase of sleep characterized by certain EEG patterns which lasts about 15-20 minutes. This type of sleep is associated with dreaming and is accompanied by autonomic and endocrine changes

(abrupt fluctuations in blood pressure, heart rate, respiratory rate, etc..) REM alternates with NREM (nonrapid eye movement) stage of sleep approximately every 90-100 minutes. The first REM period usually occurs about 90-100 minutes after the onset of sleep.

13. Hypothalamic-Pituitary-Adrenal Axis (HPA): Neurohumoral system involving interaction among different neurotransmitters functioning at certain brain systems (hypothalamus and pituitary gland) and periferal hormonal glands and their production.

II. LITERATURE REVIEW

Exploring the Recent Research on Affective Disorders with Respect to SAD

Descriptive Aspects of Mood Disorders

The terms "mood disorders" and "affective disorders" group together a number of clinical conditions whose common and essential feature is a disturbance of mood accompanied by related cognitive, psycho-motor and interpersonal difficulties (Klerman, 1989, p. 1). Traditionally, researchers refer to mood as to an emotional state that colors the whole personality (Post, 1989). According to Klerman (1989), mood is a sustained and prevalent emotion, while affect refers to the subjective aspect of emotion. The literature pertinent to this topic reveals, however, that the term "affective disorders" is commonly used by researchers and clinicians. Though the literature describes a variety of human emotions, the clinical conditions considered as affective disorders involve only two - depression and mania.

Prevalence of Depression

It is estimated that as many as 10-14 million Americans are afflicted by some form of major affective disorder (Georgotas, 1988). Furthermore, the same author indicates that one in ten Americans will experience at some time in his/her life a mood disturbance classified as a clinical affective disorder. The World Health Organization (WHO) reports that there is a worldwide annual prevalence of depression at 3-5%, approximately 100 million people (Georgotas, 1988). Depression is so common a disorder in clinical practise that some researchers consider depression as the "common cold of psychiatric disorders" and described the recent decades as an "age of melancholia" (Klerman, 1978; Hagnell, Lanke, Roesman, & Ojesjo, 1982). The literature points to the possible connection between today's fast-changing world (technology and sociopolitical changes, etc.) and increased incidence of depression. However, advances in medicine, psychology and other disciplines are frequently mentioned in the literature and seen as contributors to improved diagnosis of depression which may have contributed to an increased number of diagnosed depressive illnesses.

Diagnostic Criteria for SAD Definition According to DSM III-R

An examination of the literature reveals that there has been an increased attention given to depression and other affective disorders in the past few decades. Depression and mania were initially described by Kraepelin and later modified by Bleuer. Depression and mania were redefined and reclassified several times before the present classification was established.

The 1987 edition of DSM III-R identified the following criteria for the diagnosis of the seasonal pattern of recurrent major depression and bipolar disorders: recurrent onset and offsets must occur within a 60-day window from year to year, depressive episode must meet criteria for major depression, there must be at least three seasonal episodes, (two of which occur in consecutive years), and that the ratio of seasonal to nonseasonal depressive episodes must be more than 3:1 (Blehar & Rosenthal, 1989, p. 469). Any stressor of a psychological nature (e.g. regular winter unemployment), however, precludes the SAD diagnosis. Currently, the literature suggests that SAD criteria should be used cautiously and provisionally in an exploratory way until further research efforts identify more of the characteristics of patients with SAD

(Rosenthal, 1989; Blehar, 1989).

Causative Investigation

Epidemiological Studies

The literature review on SAD indicates that at the present time there are many epidemiological data missing and experimental research studies are sometimes controversial. This is not surprising. If one examines the literature on nonseasonal depression one will discover that it took the researchers more than one century of intensive neurobiological and neuropsychological researching before established current valid data on this illness were determined. Nevertheless, on examining the current literature on SAD, some important epidemiological data exist.

1. The incidence of SAD and the duration of the depressive episode depends on the latitude of geographic area. For example, in Washington, D.C. (39° N) SAD depressive episodes typically start in November, whereas at some northerly locations such as Fairbanks, Alaska an episode can start much earlier (Jacobsen, Rosenthal et al., 1988). Though an untreated episode ends typically in the spring, some patients never experience complete remission (Rosenthal, Wehr et al.,

1987). The majority of patients, however, recognize a positive shift in their mood as the daily photoperiod becomes longer. For example, patients experience manifestations of elated mood; increased libido, socialization, creativity, and energy; diminished appetite and decreased need for sleep (Rosenthal, Jacobsen, & Wehr et al., 1988). Epidemiological data on frequency of SAD as bipolar or unipolar disorders are presently not established.

In addition, a syndrome of recurrent summer depression was reported (Wehr et al., 1989). Summer depressed patients seem to have a sensitivity to environmental temperature ranges with worsening of their condition in humid and hot weather and improving in cold weather. Summer depressed patients seem to have symptomatology of classical endogenous depression, such as weight loss, decreased appetite and insomnia, etc..

2. The onset of SAD occurs usually in the second and third decade of life, though early onset (during childhood) can occur (Rosenthal, 1986; Sonis, 1989).

3. Studies show that there is 4-5 times higher frequency of SAD among women with more than half of them suffering from the premenstrual syndrome (PMS),

with a worsening of their condition during the winter season (Rosenthal, 1989). Furthermore, data show that women suffering from SAD and PMS benefit from light therapy. Their PMS symptomatology was reduced under light therapy treatment (Jacobson, 1988).

4. Data indicate that women with SAD seem to have a seasonal variation in birth rate that differs from that of the general population (Sack's et al., unpublished data). Studies indicate that women with SAD show peak rate of birth in May, with lower rates between August and December. This seems to be elevated to their seasonal changes of elated mood and increased sexual libido in summer and decreased sexual libido in the winter.

5. Data indicate that patients suffering from SAD undergo different kinds of medical treatment before the diagnosis of SAD is established (Jacobsen & Rosenthal, 1988). Studies indicate that 71% of SAD sufferers have been treated by psycho-therapy, 28% took antidepressants, 10% showed thyroid problems, and 9% were hospitalized.

6. Data show that light therapy (using an artificial light of 2500 lux), alleviates depressive symptoms in

patients suffering from SAD (Levy, Kern, Rosenthal, & Carpenter, 1985; Wehr, Jacobsen et al., 1986). Furthermore, studies indicate that light therapy is most efficient in seasonally depressed patients when used between 6:00 a.m. to 8:00 a.m. (Terman, 1989). Unfortunately there is no data in the current literature on the mechanism of action of light therapy.

7. Fifty-two percent of patients suffering from SAD show plasma melatonin (hormone) reduction under lower intensity of light (under 2500 lux), a reduction that is in the same manner as patients suffering from nonseasonal bipolar disorders (Levy et al., 1980; Levy et al., 1985; McIntyre et al., 1989). It seems that hypersensitivity to light by some patients suffering from SAD, as reported in these studies, may suggest that these patients are more vulnerable to develop a bipolar disorder (Levy, 1985). More evidence from epidemiological studies, as well as from biological studies are needed to confirm this hypothesis (Morin, 1990).

8. While the presence of inheritance was accepted by researchers in other types of depressions in the past, it seems that an inheritance of a biological

predisposition that makes an individual vulnerable to SAD also exists. Many of the patients with SAD have reported at least one of their first degree relatives manifested seasonal symptoms (Jacobsen, 1986).

Neurobiological Studies- Theories and Hypothesis

The literature review demonstrates that there are a number of theories on SAD currently being researched. Most of these theories relate to a comparison of seasonal variations of different biological measurements in healthy and seasonally depressed individuals, and to the response of patients to bright light treatment. The literature on SAD report that many researchers in the past decade have tried to find a tool for an explanation of human seasonal pattern of behaviour in association with animal seasonal behaviour. Researchers noted that animals show seasonal changes regarding reproduction, energy conservation, and migration. Humans manifest seasonal variations in birth and death rates, hormonal and haemoglobin levels, etc. (Jacobsen et al., 1988). Other researchers, however, point out that this analogy should be used with caution because there are no animal seasonal rhythms that can be adopted in their totality as models for SAD (Wade, Hrosovsky, Tucker, 1989). They recommend that a comparison should be made between humans and animals in terms of discrete components, rather than using a global strategy. These studies investigated neurotransmitter functioning, neuroendocrine responses, feeding and metabolism, sleep and thermoregulation (Lacaste, Wirz, & Justice, 1989; Michalon, 1990).

Hypothesis I - Hormonal

An early hypothesis proposed by researchers was the Melatonin (hormone) hypothesis. This hypothesis was most related to seasonal behaviour of animals (Rosenthal, Sack, & Jacobsen et al., 1985). Since a decrease of nocturnal Melatonin (hormone) secretion was documented in endogenous depression (Wetterberg, Beck-Friis, Aperia, & Petterson, 1979; Medlewitz et al., 1979; Wirz-Justice et al., 1979; Beck-Friis et al., 1985) many researchers hypothesized similar disorders in seasonally depressed patients. Studies over the past decade of research on Melatonin production are controversial. While some investigators (Arendt, Wirz-Justice, Bradtke, & Kornemark, 1979; Beck-Friis, von Rosen, Ljungun, & Veterberg, 1984) have found seasonal secretory patterns in Melatonin and Prolactin (hormone) characterized by fall and winter peak, other investigations have not (Gala, 1977; Reinberg, 1978). Based on further pharmacological and light therapy experimental treatment (Rosenthal, Sack, Jacobsen, 1985) this hypothesis was neither accepted nor refuted. Similarly, a hypothesized Melatonin-phase-delayed theory in seasonally depressed patients was not confirmed in the experimental studies either (Levy, Sack, & Singer, 1985). A hypothesized correction of delayed circadian Melatonin phase shift by appropriate timing of light therapy did not lead to an anti-depressive effect in all patients with SAD (Wehr, Sack, Thompson, Isaacs & Miles, 1986; James et al., 1985).

Some biological correlates among seasonally and nonseasonally depressed patients exist. For example, Gillis (1989) reports patients with SAD show on Electroencephalograph (EEG) a similar decrease of delta sleep pattern as endogenous depressives. Recently, a change in hypothalamus-pituitary-thyroid axis function was described in patients suffering from SAD. Significantly higher winter time levels of thyroid hormone T4 were found by researchers (Jacobsen, Wehr-Sack, in press) in seasonally depressed patients, when compared with a control group matched by sex and age. Recently an abnormal pituitary-adrenal response to Corticotrophin Releasing Hormone was reported in patients with SAD (Wanderpool, 1991). The author of this study suggests there might be a deficiency of CRH (Corticotrophin Releasing Hormone) in patients suffering from SAD. He hypothesizes that a hypofunctional CRH neuron, (which has an important arousal productive activity), may produce characteristic SAD symptomatology as lethargy, decreased locomotion, hypersomnia and hyperphagia.

Hypothesis II - Circadian

A disturbance of circadian systems in seasonally depressed patients was discussed in the literature (Wehr, 1982; Kripke, 1978; Rosenthal, 1989). The process involves the period of the activity-rest cycle which becomes shorter or longer than 25 hours. The period of the temperature rhythm was shown to be close to 25 hours and was associated with nonseasonal affective disorders (Weber, 1979 Weitsman et al., 1979). It was observed that a close physiologic relationship exists between sleep and mood. This relationship was demonstrated by altering the time and duration of sleep (Wehr, 1982; Kripke, 1978). A hypothesis that the human circadian system is composed of two separate interacting oscillations was proposed (Vever & Kronauer, 1982). According to these authors, one oscillator controls the sleep-wake cycle and the other a circadian rhythms of body temperature. Czeisler et al., (1980) hypothesize that physiological variables such as cortisol, core body temperature and REM sleep appear to be regulated by the same circadian oscillator, while a sleep-wake process is regulated by the other oscillator. If interaction between both oscillators is disturbed then an internal desynchronization appears and an affective disorder can occur.

The literature provides material focussing on circadian phase shift hypothesis associated with SAD (Levy et al., 1985, 1986, 1987). These studies discuss the hypothesis that seasonally depressed patients might have desynchronized phase delayed circadian rhythms while endogenous depressive patients might suffer from desynchronized phase advanced circadian rhythms (Kripke, 1983; Levy, Sack & Singer, 1987).

Results of most circadian studies are limited and problematic (Jacobsen, 1988). A major problem is that the circadian behaviour can be studied only indirectly - through observations of variations in physiological functions, which might be subject to artifacts, collectively called masking (Minors & Waterhause, 1989). Factors such as motoric activity, light, temperature of environment, sleep and feeding schedules appear to alter circadian rhythms without directly affecting the biological oscillator.

The hypothesis of desynchronized circadian rhythm is not completely supported by other research studies (Isaacs, Stainer, Sensky, Moor & Thompson, 1988; Jacobsen, Wehr, Skwerer, Sack & Rosenthal, 1987).

Hypothesis III - Neurotransmitter

Evidence of seasonal rhythms in Serotonin levels in healthy persons with winter values significantly lower than summer were reported by Lacoste and Wirz-Justice (1989). Furthermore Wurtman (1988) hypothesized the possible role of Serotonin in the regulation of carbohydrate consumption and mood in patients suffering from SAD. Significant differences in seasonal variations of plasma tryptophan (a precursor of Serotonin) between seasonally depressed patients and normal controls were reported (Cappen, 1980). Later, in a double blind studies, O'Rourke (1989) demonstrated that patients suffering from SAD responded to D-Fenfluramin (a selective Serotonin enhancer) by reversal of abnormal Hamilton rating scores. Recently, a similar Sweets-Serotonin theory was postulated by Jeanie E. Sajain (1991) with Alzheimer sufferers. Her preliminary studies showed that Alzheimer's patients who suffer from dysphoric mood eat more ice cream, cookies and pies. Current literature does not provide epidemiological studies on a possible relation between SAD and Alzheimer's disease.

Recently Oren (1991) suggested a novel hypothesis regarding SAD. This author hypothesizes that patients with SAD might suffer from winter induced retinal dopamine deficiency, or conversely, they might suffer from retinal melatonin over-activity. Accordingly, both disorders may reverse under light treatment.

Medical research during the last decade has provided us with greater insight into SAD. Though research identifies the retinohypothalamic tract as being responsible for light processing, the mechanism of the action to alleviate depression is unknown.

Neuropsychological Studies

According to the literature there are two ways of viewing neuropsychological disturbances in patients with an affective disorder (Sackeim, 1988).

First, there is a focus on affective symptomatology which is based on disturbances in brain system functions which regulates emotion. This view stresses the importance of underlying physiologic subtrates responsible for triggering and/or sustaining one's disordered mood regardless of the environment.

The second approach of viewing neuropsychological disturbances is pointing to affective symptomatology in relation to a range of cognitive disturbances. This approach, which is well respected by researchers, reflects on affective disorders and their relationship to the environment. This approach views brain function as a more complex and interconnected system (Robinson, Kubas, & Starr, 1989). It is this cognitive disturbance aspect that will be further explored in this section.

Cognitive Disturbances - Qualitative Changes

The most common cognitive disturbances in affective disorders are in the area of attention, concentration, learning and memory (Weingartner &

Silberman, 1987).

The findings of many studies in the cognitive area suggest that depressed patients perceive events qualitatively differently from the way they perceive events in their nondepressed mood. Biographical experiences, such as recall of reinforcing consequences (success and failure), positive future expectation, information about the self, and the way events are related to some mood context, are some of the more important elements in the cognitive processing of information (Weingartner & Silberman, 1989). According to these researchers a depressed mood condition acts similarly to a condition when a person is under the influence of certain drugs. It biases or determines how information will be processed, encoded or organized in the memory. Depressed patients appear to have a form of dissociative learning and memory. In this way sequences of events experienced in the past would be less likely remembered under a dysphoric mood condition but they would be remembered in the presence of strong cues (Weingartner, 1989). Mood can produce dissociations especially in connection of freely remembered information (Weingartner & Silberman, 1989). Events that were stored during a depressed period are less likely to be recovered under a normal mood state condition. On the other hand, events that were stored under a normal mood state condition are less obtainable in the depressed mood state. Recall of success and failure experiences were assessed in depressed, nondepressed and in normal controls by De Monbreum and Craighead (1977). This study suggested that all studied participants learned that they had succeeded and failed, but after a time delay those depressed were biased towards the recall failure relative to success.

Further studies demonstrate that depressed patients on two daily occasions recalled fewer happy and more unhappy memories of actual life experiences on the more depressed occasions, while reverse pattern was displayed when patients were less depressed (Clark & Teasdale, 1982).

With respect to these studies, it seems that depression-related cognitive style, and changes in how material (past and present) is processed and interpreted, are also reflected in the perception of self (Post, 1989). The changed self-schemata under depressed mood may cause negative alterations in processing information about self (Post, 1989).

In summary, the findings seem to suggest that the cognitive styles of depressed patients are different from those which appear under normal mood conditions. In addition, these qualitative changes may affect research findings of different quantitative research studies such as standard psychomotoric and laboratory procedures.

Furthermore, no study was found by this researcher that reflected on mood congruence effect and the affective tone of material encoded and stored in seasonally depressed patients.

Sensoric Disturbances

Examining the literature on the neuropsychological research in depressed patients, this researcher found that most studies were quantitative in nature and related to a nonseasonal type of depression. Research in this area indicates that disturbances in the area of processing information are very common in depressed patients. These studies indicate that patients in an acute episode of depression show sensoric disturbances (Post, 1989). Since sensoric disturbances may produce changes in cognitive responses even before an actual processing of information takes place, they deserve to be mentioned in this section. Studies indicate that depressed patients show a high threshold for auditory stimuli relative to normal controls (Bruders et al., 1975). Furthermore, studies demonstrate that affective disordered patients have reduced sensitivity in their left ear, a condition that is resolved following the remission of their depression (Bruder, Spring, Yozavytz, & Suton, 1980). Other sensoric functions such as vision and pain were mentioned briefly in the literature in relation to affective disorders. Though some earlier studies (Freedman, 1964) indicated that depressed patients showed a decreased sensitivity of vision, primary perceptual disturbance such as slowness in information processing, or disordered attention, might contribute to the reduction of vision. Similarly, the responses to painful stimuli in depressed patients is difficult to interpret. Though depressed patients showed elevated pain threshold relative to controls, (Hall and Stride, 1954; Hemphill, Hall and Crookes, 1952), that response could have resulted from slowness of motor reaction or reduced pain sensitivity (Sackeim, 1988).

Memory Disturbances

Studies in cognitive functions in depressed patients further suggest a disturbance of memory. Depressive patients seem to have errors in short-term memory. This deficit might reflect attentional dysfunction and their difficulties in concentration (Sackeim, 1988). Studies of Cronholm and Ottosson (1961) indicate that depressed patients demonstrate a disturbance in anterograde long-term memory. Though disturbance is associated with a reduced capacity to acquire new information, there is no decline in their capacity to retain this information once acquired (Sackeim, 1988). This pattern of memory disturbance helps to differentiate depressed from demented patients because the latter group seem to have deficits in the retention of information (Sackeim, 1988). Studies also indicate that there is a disturbance in retrograde memory in depressed patients (Sternberg & Jarvik, 1976). While an acquisition of new information and rehearsal is disturbed in anterograde memory, a deficit in storage or retrieval may characterize retrograde long-term memory during a depressive phase (Frith, 1983).

Laterality and Depression

A number of studies (Post, 1984) indicate that cognitive deficits in depression occur in those situations or tasks where sustained effort is required (eg. to accomplish tasks requiring elaborate processing, and other tasks requiring deep analysis of semantic and the organizational aspects of stimuli). These findings support the theory of laterality associated with depression (Silberman and Weingartner, 1983). Many neuropsychological studies indicate that the left hemisphere is associated with a cognitive style characterized as detailed, serial or intentional, while the right hemisphere is characterized by the parallel, holistic and incidental cognitive style (Weingartner, 1989). A decrement in left hemisphere function with preponderance to right hemisphere might exit in the depressive state. Furthermore, studies on general intellectual functioning and neuropsychological profiles also support the theory of laterality in depressed patients. Though many of these studies are controversial, there is evidence that there is a consistent discrepancy between Verbal I.Q. and Performance I.Q. (higher Verbal I.Q. in patients suffering from depression and disappearance of a discrepancy with recovery of depression).

With respect to psychomotor functioning some researchers (Flor-Henry et al., 1983) noted that this is a very common disorder in depressed patients. This happens because brain systems that regulate emotion overlap considerably with the part of the brain that regulates motor output. Therefore, mood disorders are disturbances of mobility. The findings of many early research studies parallel clinical improvement of depression with increased speed of responses on performance tasks (eg. Fisher, 1949;l Hall and Stride, 1954). As the literature indicates, this early work often used performance on tasks requiring complex information processing (eg. completing of the digit symbol subtest of the WAIS-R), therefore combined reduction of cognition and motor performance were confounded.

More recent findings, such as Wolf et al., (1985), confirmed the earlier observation that depression is associated with reduction in spontaneous activity. Furthermore, studies indicate that reduction of spontaneous activity includes not only gross spontaneous activity but also particular dimensions of spontaneous motor behaviour. A typical pattern of automatic speech (eg. counting from 1-10) seems to be prolonged during a depressive episode. A pattern of prolonged pause time between counting is characteristic of depressed patients when compared with a control group. In addition, the pause times are longer in the morning than in the evening in endogenous depressed patients and these effects are improved with recovery (Greeden et al., 1979; Szabad & Bradshaw, 1976).

Studies related to motor laterality in affectively disturbed patients indicate that there might be a characteristic laterality trait in depressed and in other affectively disturbed patients. Findings on this topic are, however, controversial. For example, an increased frequency of left-handedness in affective disorders was reported by Flor-Henry (1979), Lishman and McMeckan (1979); decreased frequency by Fleming and Dalton (1972) and no difference relative to controls was also reported (Merrin, 1984; Shan-Ming, 1985). Furthermore, studies (Flor-Henry & Yeudall, 1979) indicate that patients in either depressive, or manic phase of affective disorder show asymmetry in grasp hand strength with the tendency to increased their right hand grip strength.

Studies indicate that presently there is clear evidence for the existence of a functional asymmetry in the human brain of depressed patients. Though laterality is never absolute because both hemispheres play a role more or less in nearly every behaviour (Kolb, 1990) a relationship between depression and right hemisphere functioning has been suggested (Flor-Henry, 1984; Arora & Meltser, 1991). Studies that demonstrate visuo-spatial and mild left motor deficit in depressed patients (Burnback, 1980; Goldstadt, 1977; Kronfol et al., 1978; Freeman, 1985), suggest that right hemisphere plays a major role in depression.

Psychological Research

While no qualitative research on SAD was found by this researcher, most recent studies related to this issue used the quantitative method for investigating depression of nonseasonal type. These studies indicate that the existence of certain psychological features by an individual (eg. type of personality) make the person more vulnerable to depression. Kerr et al., 1972; Shapiro et al., 1972 demonstrate that the highest extroversion scores as well as the lowest neuroticism scores were obtained by depressed patients, while the highest scores for introversion were recorded by anxious patients. The current level of knowledge by researchers about anxiety lags, however, approximately a decade behind their understanding about depression (in press, 1991) and this anxiety factor might contribute to the number of attempted and successful suicides. According to recent findings, an occurrence of anxiety and panic symptoms in combination with depression increases the likelihood of a person prone to commit suicide earlier than in a person with a depressive illness characterized by common feelings of anhedonia and hopelessness (in press, 1991). Kanofsky et al., (1991) demonstrates that any patient suffering from SAD might suffer at the same time from a seasonal exacerbation of panic disorder. In addition, this author found that both conditions tend to be altered with light therapy.

Depression and Sex Ratio

The literature indicates that women suffer far more from depression than men. A recent study in Australia (Prichard, 1991) demonstrates that 5-8% of females suffer severe depression compared with 2% of men and 16% experience general depression compared with 7% men. In addition, 40% of women experience a mild premenstrual syndrome.

Furthermore, psychological research on women indicates that some life situations might lead to depression. These include: postnatal period, premenstrual tension, fear from forthcoming gynaecological treatment (e.g. hysterectomy), fertility issues, fear or trauma of violence, childhood or adult sexual abuse, monotonous high tempo work, stress caused by work involving the care of other people with problems, and minority situations faced by women. Studies indicate that women who lack intimate and trustful relationships are four times more likely to break down in the presence of a severe life event (Brown and Harris, 1978). Other studies point out the importance of life events that precede not only depression but other psychiatric disorders (Paykel and Rowan, 1979). Life events, particularly, the loss of the mother by death or separation before age 11 and blow to self-esteem were found to be connected to depression. In addition, the presence of several young children in the home predispose a woman to experience depression. Furthermore, women who are single, or who are financially dependent on the husband at the time of marital breakdown, are prone to become depressed.

According to researchers (Weisman and Kilerman, 1977; Paykel and Roman, 1979), the etiology of a female's predominance to depression is very complex. The etiology might include sex linked genes, hormonal effect and culturally determined modes of expression. Studies by Gowe (1972) demonstrate that being married has a detrimental effect for women but it has a protective effect for men. Studies indicate that psychoneurotic depression peaks in married women in the 25-34 age category, while rates for single women and men increased gradually with age (Grad de Alarcon, et al., 1975).

Research findings indicate that women appear to experience more negative events than men in interpersonal areas of marriage, family and nonfamily relationships (Chiriboga and Dean, 1978). Though they do not experience more stress than men, they do report more symptoms on a symptom checklist than men at the same level of stress (Uhlenbirths and Paykel, 1973).

Studies by Horowitz (1977) showed that women were found to rate the same life events as more stressful than men. These findings, however, were not confirmed in studies by Paykel (1977) and Holmes and Rahe (1967).

Depression and Immigrant Women

A research study conducted with immigrant women points out that women immigrants as a group, are at risk for the development of psychological problems (V. Kelly Salgado de Synder, 1987). The literature on mental health and migration strongly suggests that immigration is a stressful situation for the migrant. Individuals who migrate after the age of 14 (late immigrants) experience higher levels of stress than those who migrate prior to age 14 (early migrants) (Paddila, Lindholm, Alvarez, & Wagatsuma, 1985).

The reviewing of the literature on immigration issues indicates that immigration is a process where adaptation to the host culture can be considered as an important life event change. There is a body of literature in this area that points out some of the factors associated with acculturative stress and depressive symptomatology among married Mexican immigrant women. Research indicates that Mexican women experience many emotional difficulties as they accommodate to a host culture. There are a combination of factors (such as self-imposed pressure to succeed in a new country, lack of communication, lack of friends) that contribute to their stressful situation (Buriel, 1989). Studies indicate that Mexican women show higher rates of depression and depressive symptomatology than Mexican men (Gove & Tudor, 1973; Weismann & Klermann, 1977). The perception of support offered by the spouse through communication and intimacy was found to be an important factor for ameliorating the expression of depressive symptomatology.

Other Findings on Depression

Studies by other researchers (Jacobsen et al., 1975) point to the importance of specific abnormal patterns of child rearing among depressives. Childhood patterns characterized by abuse, verbal shaming as a means of discipline, rejection, overprotection and the absence of affection were common findings of their studies.

Another line of investigation examined birth rank and parental age of depressive patients (e.g. Munro, 1966; Greg, Hill & Price, 1967). Findings of those studies, however, were inconsistent and they were not specific.

Depression in Marriage

While no psychological research on SAD with respect to family lifestyle was found by this researcher most marital research explored married couples where one of the partners suffered from classic major depression or manic-depressive illness. In the review of this literature, this author discovered that most of the researchers used the quantitative research approach. They used different kinds of scales for assignment of couples. These studies showed that depression negatively asffects marital relationships. Rounsaville (1979) reported that depressed women are most apt to have marital relationships that are characterized by friction and hostility. Consistent with these results, Linden, Hoffman and Hautzinger (1982) demonstrated, in a similar investigation, that communication between couples with a depressed partner is more disturbed than in distressed couples without a depressed spouse. They point out that marital relationships in depressed couples are very uneven, negative and centered on somatic and psychological problems. An investigation of marital relationships of manic-depressive patients demonstrated that partners of these marriages acknowledged significantly higher marital conflict that those of the community (Hoovers, 1979). In one studied sample, 84% of the depressed patients showed a negative course in their marriages four years following discharge from the hospital (Gotlieb, 1989). Meringas (1989) reports that a divorce rate in depressed patients two years after discharge to be nine times higher than the expected rate for the general population. Findings in many studies indicate that depressed women perceived the greatest impairment as wives and mothers, expressing problems in the areas of affection, dependency, sexual functioning and communication (Weismann, Rounsaville, Prusoff, & Herceg-Baron, 1979). A conclusion from these findings indicates that "the marital relationship is a significant barometer of clinical status" (Weismann & Paykel, 1979).

The literature on marital relationships indicates that disturbed marital relationships can be a concomitant of depression and may precede depressive episodes. Because of marital problems many authors

(Friedman, 1975; Greene, 1976) recommend marital therapy as the most helpful psychotherapeutic adjunct to somatic treatments in depressive disorders. The author of this study, however, did not find any studies that investigated patients diagnosed with SAD and in their marital relationships. Therefore, a number of important questions regarding SAD and these relationships remain unresolved. A study in this area using the phenomenological method of research could lead to a better clarification of this issue, and it may help to understand more fully SAD and its relationship to family functioning.

Summary and Motivation for This Investigation

The literature review indicates that depression is a very common disorder in today's society. The many demands and cultural competitiveness of our daily life bring to all of us unexpected despairs and disappointments. It is safe to note that there is nobody who does not experience some period of discouragement and sadness. Sometimes a depressed mood exists in reaction to some outside (exogenous) adverse life situation, such as, loss of person through death, divorce, financial problems, or loss of established role, etc.. These depressed moods are often classified as secondary depressions and they are often considered as healthy and natural reactions (Harrison, 1986). If the intensity of depressed mood, however, interferes with an individual's daily activity, or if there is the presence of suicidal thinking, then such conditions have to be carefully evaluated.

The literature review indicates that depression has four sources: genetic (neurotransmitter dysfunction), developmental (childhood events, personality disturbances), psychosocial (divorce, job loss) and seasonal (lack of day light of a certain intensity). While the literature focuses mostly on affective disorders of a nonseasonal type, the research of the last decade has begun to focus on seasonal type (SAD) and it has provided us with a greater insight into this condition.

Currently, there are three hypotheses to explain the pathogenesis of SAD: namely, hormonal, circadian and neuro-transmitter. The mechanism of the light action in patients successfully treated by light-therapy is presently unknown. At this time it is unclear why some people are more vulnerable to develop

SAD than others under the same geographical conditions. According to the literature, this disorder might be an extreme extension of the 'winter blues', a condition experienced by many people. It is characterized by depressed mood, hypersomnia, social withdrawal, decreased libido, craving for sweets following by weight gain and interpersonal difficulties. This suffering can reach a degree that interferes with one's everyday activity.

Research shows that more than 60% of patients diagnosed with SAD respond favourably after three days of light treatment. The literature indicates that the majority of patients benefit from light therapy. Some patients benefit from the combination of light therapy and drug therapy. There is a minority of patients who do not respond to light therapy. Furthermore, while some patients need anti-depressive drug therapy only during the winter season, there are others who need anti-depressive drug therapy throughout the whole year.

It is the view of this author that there might be other unknown factors in addition to the lack of light that plays an important role in the course of SAD. The literature on SAD reports that during the last decade a number of studies were conducted in different parts of the world. These studies involved mostly medical research (laboratory and psychiatric), and used the quantitative method for their investigations. Patients with seasonal depressive symptomatology were evaluated by a battery of different psychological scales before a diagnosis of SAD was established. Following the use of light therapy these patients were further evaluated for depression. Those who responded positively to light therapy showed a significant decrease in depression. Other studies used laboratory procedures and animal models in their investigations of SAD. All of these investigations mentioned above used the natural science method of research. Researchers using this method tried to explain SAD objectively, that is, by measuring different biochemical variables, or by assessing patients' mental symptomatology by various assessment scales. Their goal was to predict, and later to control the illness. This is a traditional research approach and is characterized by causative or correlative relations among variables. This method represents an empirical orientation in the search for cause and effect relationships.

While this natural science's orientation approach is very important in research of SAD, this author believes that phenomenological data from this investigation will complement previous studies. Though the natural science method explores SAD objectively, an aspect of perception and understanding of the disorder from the patient's point of view is not acknowledged. Acknowledgement of the patient's point of view through this qualitative approach may provide a greater insight into the inner world of married seasonally depressed patients, and it may also clarify their relationship to their everyday family life. This approach does not predict any happenings but it attempts to understand and interpret patients' experiences. It is hoped that findings from this study could help to improve communication between health professional/patient and family members/patient. The inclusion of the patients' perception; of their quality of life both before and after light treatment, of how they see themselves and their family members, and of their overall year-round life experiences may identify the most painful aspects of their disorder. This, in turn, may reveal significant factors that answer some of the questions that the traditional scientific method has failed to capture. Ultimately it is hoped that the findings will contribute to a more effective method of treatment for patients suffering from seasonal affective disorder.

III. METHOD

Co-researchers

My four volunteer co-researchers for this study are members of a Seasonal Affective Disorder research program currently undergoing in Edmonton.

The first co-researcher, Bonnie, is a 46 year old married woman and the mother of two teenage girls. She is a nurse and is employed on a part-time basis at a hospital's emergency room, working night shifts. Bonnie is the youngest child in a family of five. She was raised in Ontario and moved to Alberta 20 years ago. It was when she moved to Alberta that she first experienced winter depression. Bonnie is a smoker and has had a medical history of hysterectomy and cholecystectomy, both operations performed some years ago. As of February 1991, she has been using a combination of light therapy and fluoxetime to help her recover from her winter depression. Phototherapy was administered to her by means of a light helmet. These helmets, one with a broad spectrum of 2500 lux bulb and one with a placebo bulb (less than 500 lux) was used by her to allow for a self-control design. Bonnie wore one helmet for a period of one hour on seven consecutive mornings and evenings. It was then exchanged for the second helmet, and the therapy continued for seven more days. An evaluation was performed on days 1, 7, and 14 of the treatment according to a double-blind design. The battery of assessment tests including HAM-D, Revised HRS-D for Depression Collaborative Research Program, and Beck Depression Inventory (BDI). Following the two weeks of the experimental design, Bonnie responded to bright light (2500 lux) treatment. She purchased a light helmet for subsequent use and continued winter time use was supervised by the research team.

I first met Bonnie at a SAD group meeting in February, 1991. Our common medical background helped her to be more open in sharing with me her experiences with SAD.

The second co-researcher, Caroline, is a 50 year old lady, married for 25 years and the mother of two adult children. Caroline was born and raised in a small town in northern Alberta, and has only one sibling, a younger brother. Her younger brother is a teacher and is in good health. Caroline has been a homemaker since she got married. Caroline and her husband have lived in Edmonton more than 20 years. During that time she suffered many health problems and was seen by many medical specialists (internist, orthopaedic, neurologist, allergyologist, psychologist, psychiatrist, and others). When she was 17 years old she was diagnosed with hypothyroidism and since that time she has been taking a hormonal drug, Synthroid. She states that she was diagnosed with hypoglycaemia three years ago and has to be very careful about her diet. Furthermore she notes that she suffers from a food allergy. Some years ago, Caroline was involved in a car accident and has since suffered from back problems. A physiotherapist was only partially helpful in alleviating her back pain.

Caroline began smoking at age 17 years. She smokes a package of cigarettes per day. She revealed that she had a tubal ligation after her son was born.

Because of her lack of energy, especially during the winter season, she was prescribed different kinds of antidepressant drugs. Unfortunately, she did not get relief after taking them. After listening to a radio broadcast about the SAD research, approximately one year ago, she contacted SAD researchers in Edmonton and became one of their participants.

Caroline also remarked that her daughter is a hard working student who suffers from tiredness and was diagnosed two years ago with chronic fatigue syndrome. Her son was diagnosed with Tourette's syndrome four years ago but is currently doing well.

I met Caroline for the first time at a SAD group meeting in February, 1991 and since that time we have been in regular contact by telephone.

My third co-researcher, Paula, is a 39 year old lady who immigrated to Canada from Mexico in 1983 to join her Canadian husband. She is one of two children. Her younger brother, a 32 year old engineer, is healthy and lives in Mexico. Paula received a Bachelor of Education degree in 1974 at the University of Mexico and for the following five years she lectured university students in Mexico. Since 1979 she continued her university studies in Canada and obtained a Master's Degree in Experimental Psychology in 1982. She returned to Mexico for one year and came to Canada in 1983, at which time she married her husband. In 1984 Paula's husband got a new job in Alberta and they both moved to Calgary and later to Edmonton. In Alberta Paula was unable to find employment, felt depressed and started to suffer from headaches. Gradually, her health problems (tiredness, headaches, PMS, problems getting up from bed in the morning, etc.) got worse during the last five years. During this period, Paula was seen by many specialists including ophthalmologist, urologist, endocrinologist, gastroenterologist, two psychiatrists, a chiropractor, and five general practitioners, without any improvement in her health. In the hope of relieving her headaches, she consented to her dentist's recommendation that she replace the mercury dental fillings with a non-metallic substance. Paula underwent 36 Acupuncture sessions without any long-lasting relief from headaches. Though she tried to quit smoking (she is a smoker since she was 15 years old), for a period of six months her headaches were still persisted. Caroline stopped daily drinking of coffee for a period of time without any relief either. She attempted exercise three times a week without any improvement of her headaches.

Paula did not experience similar health problems when she lived in Mexico. She underwent only two minor surgeries there (Tonsillectomy and Appendectomy). No one in her immediate family suffers from similar health problems. Her mother is healthy. Her father suffered a heart attack and died at the age of 64 years. Since Paula first experienced medical difficulties she has been unable to maintain full time employment though she presently works on a part-time basis.

After listening to a radio broadcast on SAD research in Edmonton in 1990, she contacted the researchers and became one of their participants. Paula was advised to use light therapy. Paula's husband made her a light helmet. Consequently, she now self-treats herself with a light source of 5000 lux intensity. First she tried light therapy in the evenings but she woke up during the night unable to return to sleep. She changed her pattern to a morning light treatment (from 9:00 a.m. to 11:00 a.m.) and experienced some improvement. Though less severe, her headaches continued. After Paula experienced some side effects from different types of antidepressant drugs (for example, constipation, dizziness, sleep disturbance) she stopped taking them. Currently she takes only Synthroid for her hypothyroidism and analgesics ("sometimes more than 8 Tylenol daily") because of her headaches. In the near future Paula plans to try acupressure for relief of her headaches.

I met Paula for the first time at a SAD group meeting in February, 1991. Her ease of communication and her readiness to participate in my project reflects in part our mutual story - we are both immigrants to Canada.

Finally, my co-researcher Glenda, is a 50 year old lady, married to her second husband for 16 years and has three adult sons from her first marriage. She divorced her first husband 21 years ago and took care of her three young sons. It was at that time that she was prescribed, for a short period of time, anti-depressant drugs. It was also during that period that Glenda took university courses and finished her studies as a registered nurse. She worked full time all her adult life except the last seven years when she felt she was "burnt out". At that time she decided to slow down and tried intensive psychotherapy in the hopes of relieving her depression.

When Glenda was six weeks old she was adopted by a family with an alcohol abusive father. She recalled her childhood as very painful, marked with much violence. She has two older brothers, from her adopted family.

One brother committed suicide and the other is incarcerated following a murder conviction. She has been unsuccessful in her attempts to contact her biological mother, though she still remains in contact with her elderly adoptive mother. When in her twenties, Glenda was diagnosed with Menier's disease. At age 34 she underwent a hysterectomy. In 1989 she was diagnosed with osteoarthritis and suffers from frequent hip pain. Glenda continued to hold down a part-time job. In 1991 she became one of the SAD research participants following a radio broadcast requesting volunteers for the SAD project. She was advised to try light therapy regularly during the winter period. Glenda and her husband, in the hope of bringing more light into their home, modified their home environment (they built in more light fixtures in rooms, increased the size of the windows, changed color schemes in rooms, etc.).

I know Glenda from the SAD meeting groups.

Bracketing

As a trained physician with personal experiences of depression, I may have developed certain prejudices and presuppositions. When I began this study I was motivated to learn more about this recently defined illness, one which frequently affects many people. As a practising physician I frequently met depressed people and recognized the negative effects of this illness has had on them and on their families. I discovered that often their families showed certain predictable maladaptive behaviours. I know from my professional experiences that patients with affective disorders were often afflicted by recurrence and high levels of chronicity. Maladaptive patterns in family functioning occur when one member suffers from chronic pain. These patterns may include over-supportive behaviors and angry or chaotic family behaviors. I question whether a similar pattern of response exists in a family when one member suffers from SAD. Since it is estimated that about one-third of depressed patients fail to improve after using antidepressant drugs, could light therapy be more effective as a method of treatment in the recovery of some of those patients?

In arousing my interest, a number of questions came to mind. Are there other factors which could interact with patient depression? What is their experience with the illness? How do they cope with the illness in their family? I believe that if I could gain some insight into these questions regarding SAD, then the results would be useful for professionals who work with SAD patients.

In addition, my personal experiences with depression increased my interest in this area. As an immigrant to Canada, I went through a very difficult time following my arrival. Since I was unable to speak English, to work in my profession and to return home, I felt very depressed. In a recent conversation with my husband, I shared my experiences. He remarked that my depressed mood was the most difficult period of our marriage. He acknowledged that he felt guilty, frustrated and angry when he looked at me.

These are my experiences which stimulated my interest in this research. I chose to explore the world of seasonal depressive patients with the hope of finding a clue to a more effective treatment approach. Furthermore, I believe that in listening to a patient's experiences with SAD, a greater insight into my personal life would lead to my own personal growth.

Procedure and Analysis

Data were collected during one 3-hour tape recorded interview with each co-researcher. All interviews took place in the homes of the co-researchers. They shared their experiences that they believed were most related to their disorder. In general they were challenged to expand and clarify their experiences through nondirective questions. The interviews were transcribed in a protocol and the co-researcher's descriptive experiences are presented.

The significant statements pertaining to the investigated phenomenon were selected and organized under broader descriptive themes from each protocol (See Tables Ia, IIa, IIIa and IVa in Chapter IV). These themes were further organized into first and second order cluster (See Tables Ib, IIb, IIIb, IVb and Ic, IIc, IIIc and IVc in Chapter IV). This was done so that the meaning of the experiences could be clarified. The descriptors of the themes identified refer to the original interview, thereby grounding the themes. A descriptive summary was then formulated in relation to the SAD experiences for each co-researcher and their connection to marital life.

Finally, an across person analysis of theme was made. Following that, a synthesis of the pattern of shared experiences (common themes) were made (Table 4).

Following the completion of analysis the findings were returned to the co-researchers for "goodness of fit". The results of the analysis were then discussed with each co-researcher. With respect to accuracy only two descriptors relating to a second order cluster theme was modified by the co-researcher.

Data Presentation

In Chapter IV the list of themes that emerged from the protocol are presented for each co-researcher. A cross-personal analysis of themes is presented as Table V and VI in Chapter IV.

Ethical Considerations

Ethical approval for this research study was obtained from the Department of Educational Psychology, Ethics Review Committee, University of Alberta. An overview of this research project was explained to each co-researcher who signed for participation in the project (Appendix A). Co-researchers were informed that participation in the study was voluntary and they could withdraw at any time without penalty. All co-researchers were assured that information recorded remains confidential. To protect their identity co-researchers' names were altered.

IV. RESULTS AND DISCUSSION

Discussion of Results from Each Table With Focusing on Final Tables

Chapter IV relates to the most important findings of this research and their discussion in relationship to the original question in this study "What is the everyday lived experience for a married client diagnosed with SAD?". The outline of the phenomenological procedure used for data collection and analysis is presented in Chapter III.

Table Ia -- Bonnie

THEMATIC SUMMARY

THEMES EMERGING FROM PROTOCOL	INSTANCES (EXCERPT FROM PROTOCOL)	# of para-graph
1. Seasonal	... that the fall always brought upon a change in mood.	(4)
2. Fear	I dreaded this winter because I thought if that happened again, I didn't know if I could cope with it.	(5)
3. Work	I just couldn't cope with anything and had to quit work and take a leave of absence	(5)
4. Energy	an effort to even get out of bed in the morning no matter how much sleep I got	(8)

6. Concentration	I could not read a book ... I would not retain what I read	(175)
7. Routine	I remember distinctly you know, being afraid to drive	(155)
8. Helplessness/ Frustration	I couldn't find any solutions to that. This was exhausting	(175)
9. Metaphors/ Images	I got through Christmas just by the skin of my teeth just sort of hanging on	(12)
10. Direction	you just wake up in the morning and you're down	(64)
11. Guilt	I was really afraid that I was doing damage	(165)
12. Communication	... and couldn't verbalize it	(15)
13. Husband	He resented and there was a lot of anger	(12)
14. Children	But when they'd walk in the door, I would find it very difficult to cope with them	(59)
15. Physician's Care	I had some reservation about it because I didn't know if I really trusted him	(33)
16. Sleep	I wasn't sleeping	(18)
17. Weight	I had lost about 20 pounds at that point over a period of six weeks.	(18)
18. Desire	I was searching so much for an answer. Like I didn't want to be depressed and I didn't want to be incapacitated	(167)

19. Sex Drive	During the summer months I find sexually I am more receptive	(105)
20. Psychiatric Treatment	I started to see a therapist in order to help me	(175)
21. Medications	The Prosac and the helmet are the only things that have really change, you know	(168)
22. Social Withdrawing	I didn't want to go to the show	(148)
23. Anger	But you are angry at yourself so consequently, you are angry at everyone around you	(61)
24. Loss of Enjoyment	You don't care if you go out to a show	(87)
25. Optimism (Post Therapy)	Like I feel like I've gained another three months a year	(147)
26. Social Interaction (P.T.)	I would be interested in participating in a kind of support group	(175)
27. Motivation	I've gone outside the home and become involved in things that I care about again	(148)

Though a number of research studies on SAD have been conducted, these have focused on the pathophysiology of the illness. SAD was researched only from the natural science point of view. An effort in the present phenomenological study is to illuminate the SAD experience in relation to Bonnie's everyday marital life. A number of themes on this table reflect characteristics of SAD symptomatology as described in the medical articles. These include, the loss of energy, concentration, and desire, social withdrawing and problems related to work. Special attention was drawn by this researcher to the client's use of metaphors/images ("drowning in quick sand, beating my head, keeping my head above water"), to help illustrate the phenomenon of SAD. Other themes, such as communication and weight were also used by medical professionals to characterize SAD symptomatology. Bonnie's description of a drastic drop in weight and her early morning awakening, suggested that her illness was atypical. Such symptoms are also related to a major depression of a non-seasonal pattern. These particular categories deserve a greater exploration since other factors such as stress related to work, family functioning, financial problems, etc., can modify the course of the illness.

Such categories as feelings, guilt, fear and seasonal, indicated that Bonnie's winter emotional suffering was very intense. The suffering was further aggravated by feelings of helplessness and frustration, on the one hand, and by the experiences of anger, on the other hand. Themes on Table Ia indicated that Bonnie suffers from communication problems in the family (husband and children). This finding confirmed the medical findings. Furthermore, her inability to communicate with her physician made the situation tense. This intensified her feelings of helplessness and frustration. In response to these experiences she described her desire to be left alone (social withdrawing), and was unable to perform her everyday activities (loss of energy).

All these experiences were reappearing annually during the winter season. Each fall Bonnie feared that following the summer a terrible suffering would re-occur (fear). The most terrifying feeling she experienced was the dread of failure to perform her role as a nurse (fear, work).

Treatment brought a new sense of life for her (medication, psychiatric treatment). Bonnie regained motivation, optimism and an interest in social interactions.

Table Ib -- Bonnie

A LIST OF HIGHER ORDER CLUSTERS OF THEMES

HIGHER ORDER CLUSTERS OF THEMES	THEMES EMERGING FROM PROTOCOL
a. Time	Seasonal, Fear
b. Professional Difficulties	Work, Energy, Social Withdrawing
c. Mental Status	Feelings, Routine, Desire, Concentration
d. Sense of Self	Metaphors/Images, Direction
e. Trust	Physician's Care, Communication
f. Hurt	Guilt, Children
g. Physical Status	Sleep, Weight
h. Marital Difficulties	Helplessness/Frustration, Loss of Enjoyment,Anger, Husband, Sex Drive
i. Treatment	Psychiatric, Medication, Light Therapy
j. Ill Again (P.T.)	Direction, Loss of Enjoyment
k. Isolation	Social Withdrawing, Loss of Enjoyment
l. Change (P.T.)	Optimism, Motivation, Social Interaction

The intention here is to list themes of a higher order cluster in order to understand the complexity of Bonnie's SAD experiences. Here the theme time is categorized as seasonal and fear. It reflected her perception of the cyclical nature of her illness, a process that she seemed to be well aware of during the winter period, and her well-being during the spring and summer. She was unable to do much about her perception, consequently, was overpowered by fear and dread shortly before the winter season commenced. The most deteriorating result of her illness was her mental status category. She describes her lost ability to function in basic mental processes, such as, concentration, memory and doing routine work, ("I couldn't read a book, I wouldn't retain what I read. I remember distinctly, you know, being afraid to drive. I had difficulty doing the run-of-the-mill things, you know.").

Related to that category Bonnie became aware of a different sense of self, that is, she felt lonely and tired. She felt as if she was in a strange world. Unable to explain why and what was happening to her, she looked for comfort in the isolation where nobody would bother her. But it was impossible to escape from that condition. Her failure to communicate with her family led to her experiencing guilt (hurting them). Furthermore, she experienced a deterioration in her physical status. The results were that she felt unsafe in her work (professional difficulties and had to quit her job ("I couldn't cope with anything and had to quit work and take a leave of absence."). She felt misunderstood, and the anger that surfaced was directed towards her husband for not helping her get away from this state. It was as if the two of them lived in different worlds.

Bonnie experienced marital difficulties ("I didn't care if he went to a show ... didn't care if he went to a dinner, or went to a hockey game."). She finally desired to be helped and to be well again ("I was searching for an answer. Like, I didn't want to be incapacitated."). Treatment (She felt to be well post therapy). Change (I just found fantastic difference, you know, just a wonderful difference ... life, work, everything changed ... a real dramatic change. Her experience of sadness re-occurred occasionally post-therapy). Ill again (I just ... wake up in the morning and you are down).

Briefly, this section points out that Bonnie experienced disturbances in many aspects of her everyday life. External factors such as her marital relationship interacted with her SAD and perpetuated her overall negative experiences. For example, if the self is isolated then there is a loss of communication with family members and this, in turn, leads to an intensification of her being misunderstood.

Table Ic -- Bonnie

A LIST OF HIGHEST ORDER CLUSTERS OF THEMES

HIGHEST ORDER CLUSTERS OF THEMES	**HIGHER ORDER CLUSTER OF THEMES FROM TABLE Ic**
A. Stress	Time (Winter, Fall) Professional Difficulties (Work)
B. Health	Mental status (feeling unsafe) Sense of Self (beating my head), Physical Status (weight, sleep)
C. Low Self-Confidence	Trust (reservation), hurt (doing damage, isolation (I didn't care)
D. Coping	Mental difficulties (get's worse), professional difficulties (quit work)
E. Body Needs	Physical status (weight and sleep), Treatment (Prosac and light therapy)
F. Minor Relapse	Treatment (Prosac and light therapy), ill again (you're down)
G. Healing	Treatment (Prosac and light therapy), change (best winter)

Table Ic is a list of themes clustered at a second order level, a higher order of clustering than found in Table Ib.

The theme stress indicated that Bonnie has been seasonally exposed to a stressful situation related to SAD. The period included the end of the fall and the winter season. The most stressful experience was the failure to perform at work, and the fear of the loss of her job, ("I was really, really frightened by it and I dreaded this winter because I thought if that happened again, I didn't know if I could cope with it.").

An experience of low self confidence is a further theme. That experience originated in a few themes that were mentioned in a previous section. These included the experience of disturbed communication, and the feeling of being misunderstood by others, (physician and family members). Furthermore, feelings related to her inability to explain what was happening and the reason for her behaviour, and of her inability to manage her situation led to her guilt, ("I should understand and I should have a grasp of it, you know, and have more understanding, but why, why couldn't I figure it out? Why couldn't I get a handle on it?").

The theme health consists of Bonnie's experiences of disturbances in her mental and physical being. The suffering was multiplied by feelings of helplessness and of misunderstanding by others.

Related to the health theme was the theme concerning body needs. In response to Bonnie's experienced mental and physical disturbances, such as her lack of concentration and memory, she experienced a gain in her weight. Body themes, health and body needs reflected the fact that her body was negatively affected by her disturbed mind. As one part started to heal the other felt better. This was indicated in the theme healing - the mental disturbances decreased, and with it her physical part also healed.

Accordingly, Bonnie regained motivation and optimism ("I find that I feel better, I have more energy. I am more interested in what they are doing."). Despite the treatment with light therapy she experienced occasional re-occurrences of her illness. This included the theme minor relapse ("You are down"). These were experienced, however, as of a mild intensity and lasting for a short duration. The final theme left for discussion includes her experiences of coping with SAD in her everyday life including her marital and professional life. This theme is related to the first theme, stress. They both closely interact in the sense that stress affects coping, and inappropriate coping, in turn increases stress. The theme coping indicated that she experienced difficulties in her dealing with SAD in her daily life ("I had no control over my responses, or what may happen to me and I didn't understand it. I just couldn't cope with anything.")

In brief, the list of themes of a final cluster point to the fact that there are experiences in Bonnie's life that should be explored in order to have a better understanding of the illness more completely.

To conclude, the results indicate that Bonnie's experience with SAD caised marital stress. The results demonstrate that a possible maladaptive problem of family behaviour in Bonnie's life may exist, and it appears to contribute to perpetuating the SAD condition.

Table IIa -- Caroline

THEMATIC SUMMARY

THEMES EMERGING FROM PROTOCOL	**INSTANCES (EXCERPT FROM PROTOCOL)**	**# Paragraph**
1. Time (past, present)	But ... it's like it's just like the last two or three years	(21)
2. Getting Up	... Couldn't get up and once I got up, I kept moving like I did not want to move	(25)

3. Picking Up	But after time, it's usually, usually the end of June, begin to pick up	(1)
4. Lack of Energy	And I would come home burnt I just know that I'm very tired	(115) (92)
5. Communication	... like I have difficulty even verbalizing, putting my words like	(5)
6. Feelings	... but it's like a great handicap just a great handicap ... being so down and yucky feeling	(24) (105)
7. Routine	... it takes me a long time to get my breakfast together	(5)
8. Diurnal Mood	And then there are times when the evenings are usually my better time there is a great difference in the morning and my evenings in my winter times	(6) (7)
9. Seasonal	You really suffer all winter ... well, in the summertime, no it's easier	(205) (215)
10. Memory	It's like I may get completely forgetful to what I am doing here I have to stand there and think like what was I doing?	(5) (5)
11. Concentration	... like if I am making tea and something else disturbs or catches my attention here, I don't know. I have to stand there and think like what was I doing.	(5)

12. Helplessness/ Despair	... I don't know simply they just don't go (my motor skills) ... they just don't go together. See like I want to -- I can't do that anymore	(20)
13. Frustration/ Functional Ability	It's difficult. I takes me so long you know because like my motor skills don't jive with my facts ... they just do not go together ... It's frustrating. It bothers me.	(20) (30)
14. Appreciation	... I - I was always very creative. I mean, ... but uh, my husband thought it was a waste of time. Everything was a waste of time, waste of time	(176)
15. Social Withdrawing	I just could not handle everything. So then one by one, I quit this and I quit that but so many things. And it gave me a little bit of release.	(30)
16. Fear	... and I couldn't get out of bed, you know, it just haunts me	(75)
17. Household (Umwelt)	... It's almost ... like that I'm at a standstill with everything, you know?	(24)
18. Metaphors	I was just being choked up all these things	(30)
19. Sleep	How was I? Very down, very tired and no energy. Just sleep.	(109)

20. Desire/Hope	I just go for help here and there and everywhere ... and I wanted to get out there and do these things ...	(83) (90)
21. Pleasure	When I see flowers I feel so good. I would like to have flowers everywhere.	(30)
22. Husband	Oh, it bothers him. I really, really ... ... Oh, well he was spoiled. He was spoiled by mom and dad at home	(43) (59)
23. Conflict	... he is an early morning riser which was a big problem ... ... we are often about my children	(88) (75)
24. Anger	Oh, I came into the house and the only thing that was done was what I had done before leaving the house. I was so upset. I was really upset.	(58)
25. Progression	It's just,it's just getting progressively worse.	(20)
26. Family Life	Like, life was falling apart all around	(120)
27. Guilt	I just feel guilty when I am feeling well and I can't stay in bed when I am not well because I feel guilty.	(58)
28. Perfection	... And still my house was perfect ... my meals were perfect ...	(24)
29. Self-together	It it's important. I would like to get this, all this together.	(115)

30. Childhood	... but my brother did the same stuff as I did. Like we cleaned and did dishes and cooked in the house.	(62)
31. Early Marital Life	But there were times, yeah, when I just remember like I- mind you, I could be crying so much during the night.	(75)
32. Medication	I've always needed pills.	
33. Concern for Parents	And like, she was totally dependent on me. And we had a very bad; a crisis in our managing.	(120)
34. Confusion	And how can I tell you what's wrong if I myself don't know what's wrong.	(92)
35. Doctor	Like in the last number of years I saw doctors more often.	(110)
36. Headache	I used to get bad headaches during my period times.	(96)
37. Disappointments	And then I would change to general practitioners. But after that, uhm, you are under stress. Get more exercise. And I knew, that wasn't the problem.	(136)
38. Self-Observation	I have so many symptoms. I found out that I had Candida. And I had, I'm allergic to every food plus environmental.	(146)
39. Trust	... wasn't even talking at this time. So he (husband) didn't know where I was going or what I was doing.	(125)

40. Motivation	Yeah. My classes start and um I could be going five days a week.	(32)
41. Death	Yeah, I would say there were two of them (years) most difficult that year when I was saying that the year before my dad died.	(108)
42. Self-Care	Anyway, so it was just an effort now to sort of wash myself up and get myself, you know.	(127)
43. Diet	So I was really, like a hundred and ten percent. I stayed on that diet and I wasn't and feeling any better.	(139)
44. Change (P.T.)	Oh, I just felt, yeah like there was a darkness just just lifted off me and I just felt uh	(174)
45. Blame	Yeah, cause he likes going to the YMCA ... I'd be home with crying kids all day long and he'd come in and have supper and then he's gone for an evening.	(49)

A number of themes in this table reflect Caroline's experiences with SAD.

The theme time, seasonal and progression indicated Caroline's awareness of a gradual worsening of her condition. The theme getting up reflected her daily effort to start a new day. Other themes, such as lack of energy, concentration, memory, social withdrawing and communication confirmed many of the characteristics used to describe depression by some medical researchers. The theme *routine, household* and *self-care* indicated that Caroline's everyday suffering from SAD was intensive and she was unable to perform her usual everyday home activities. Though she felt helpless and frustrated - *helplessness, frustration* she had a desire to be healthy *desire/hope* and she searched for relief - *self-observation, doctor, medication*. Her hope turned frequently into despair - *disappointment*. She experienced misunderstanding from her husband - *husband, communication, trust* and professionals. This contributed to her confused state about her condition - *confusion* and feeling guilty - *guilt*. The progression of Caroline's illness led to her experiencing emotional and physical symptoms of panic - *panic*. Caroline's inability to perform her everyday home activities were even more pronounced by her failure to do things perfectly - *perfection, self-together*. Discouraged by her inability, frustrated in not finding a solution, she desired to be left alone. Though loneliness - *social withdrawing*, sleep brought her relief. Unfortunately, this lasted only "temporary". Common household demands and her low efficiency in housework combined with her husband's lack of understanding left

Caroline feeling guilty. Guilt and anger in her marital relationship negatively affected her family life. Caroline felt insecure in most aspects of her functioning and she illustrated her feelings by the use of metaphors (I was just being choked by all these things). She desperately searched for the cause of her unsatisfied marital life - childhood, early marital life and felt that her husband might be responsible for her problematic relationship - blame, appreciation. Other themes, such as death, and concern for parents, indicated that Caroline's everyday life at home was more complicated by other environmental stressors. Her personality trait perfection, her need to do things perfectly at home (my house was perfect), diet (like a hundred and ten percent I stay on that diet) and taking care of her elderly depressed mother. This required much of Caroline's energy, energy she did not have, and thereby intensifying her sense of inadequacy and guilt. Despite despression, Caroline experienced some joy when for example she saw flowers at her home - pleasure.

Caroline's low mood experiences were present all year round with winter augmenting her depression and diminishing during the summer - picking up. While she experienced diurnal mood changes all year round with "feeling better at evening times" this pattern was more pronounced during the winter season. Light therapy brought a new perspective to her life change. She experienced more interest in socialization motivation. Her "getting up" problem in the morning however did not improve.

Table IIb -- Caroline

A LIST OF HIGHER ORDER CLUSTERS OF THEMES

HIGHER ORDER CLUSTERS OF THEMES	**THEMES EMERGING FROM PROTOCOL IIa**
a. Awareness of time as a cyclical process	Time (recent, past, present) Seasonal diurnal mood
b. Struggle	Functional ability, getting up, routine, self-care, communication
c. Mental Status	Concentration, fear, anger, memory, guilt, frustration
d. Increased Awareness of self (Eigenwelt)	Feelings, metaphors
e. Isolation	Social withdrawing, lack of energy, helplessness, getting up, progression
f. Personality Feature	Perfection, self-together
g. Physical status	Diet, self-observation, headache, sleep
h. Responsibility	Concern for parents, perfection
i. Marital difficulties	Appreciation, household, family life, blame, conflict, frustration, functional ability, anger

j. Reflection on past	Death, childhood, early marital life
k. Increased awareness of self, world	Confusion, social withdrawing, blame, disappointment
l. Reaching out (for help)	Doctor, medication
m. Improvement	Pleasure, picking up, hope, motivation
n. Relationship roles (Mitwelt)	Trust, family life, social withdrawing

The list of themes here illustrated the first order cluster of themes from Table IIa. The hope is that by clustering themes, more understanding into Caroline's daily experience with SAD may be achieved.

The theme *awareness of time, as a cyclical process* reflected Caroline's perception of her changing mood as a process depending on the season, on the one hand, and on the day time on the other hand. She reflected on her most difficult disturbances in the theme *struggle*. Here she indicated her inability to perform in her usual daily household chores which started after she woke up (it would depress me so much because I want to get up like everybody else does and I can't, or "It's almost like that I'm at standstill with everything, you know?"). Her experience of frustration in attempting to overcome her disability to function in her usual home activities were indicated in the theme increased awareness of self - Eigenwelt. (It is a great handicap, being so down and yucky feeling). Here she used metaphors to express her suffering (I was just being choked). Caroline indicated that she experienced disturbed functioning in the basic mental processes (It's like I may get completely forgetful to what I am doing here.). Furthermore, Caroline lost her trust in her husband and in the helping professionals. She desired to be left alone where nobody would bother her by trying to communicate with her. She found some relief in her long sleep - physical status (I felt zonked out or I didn't want anybody to talk to me).

Her perception of the discrepancy between her own functioning and her environmental demands, combined with her inability to change her condition led her into her own distant world - increased awareness of self. She was unable, however, to cut all her social connections with the outside world - responsibility (parents care and family life). Unable to handle this situation, Caroline felt more frustration and guilt (I just feel guilty, when I am feeling bad and I can't stay in bed when I am not well because I feel guilty). Her negative feelings were even more aggravated by her perfectionistic trait (My meals were perfect). Her effort to find support from her husband was not met - marital difficulties (we are often disagreeing about my children) and Caroline's feelings of confusion and guilt intensified. This further negatively affected her family life, and Caroline's illness progressed. (It's just getting progressively worse). In her despair she tried to defend herself - blame and focused on her husband's unsupporting behaviour - reflection on past, childhood. At certain times Caroline's desire to be healthy was expressed in the theme reaching out (doctor, medication). Every time her new hope for health was turned to a new disappointment and the fear became a permanent component of Caroline's suffering. She experienced spontaneous improvement of her condition during the summer seasons and whenever she saw flowers in her home environment. Light therapy had a positive effect on her mood. Her major difficulties continued though now with less intensity.

This section indicates Caroline's experience with a mood disorder in her everyday life. The themes here indicated that Caroline experienced disturbances in different aspects of her daily functioning and she experienced lack of support from her husband. This, in turn, aggravated her suffering. Other factors, such as striving for perfection, also adversely contributed to her suffering. It seems that Caroline suffered from depression all year round with winter worsening of her condition.

Briefly, data analysis here indicated that she suffered from disturbances in all three aspects. First, a disturbance of her 'Eigenwelt', her self-world of inner feeling; second, a disturbance of her 'Umwelt', her environment around her body; third, these combined disturbances negatively affected her 'Mitwelt', that is her interpersonal world. According to Binswanger, a German theorist, (in Rychlak, 1981, p. 636) human existence is functioning in all three aspects and is interconnected with each other. Any disturbance of one aspect can further disturb the other. From this theorist's perspective, a person is viewed as a total unit of body and mind. It seems that Caroline's suffering was complex and in need of healing in all three aspects of her existence.

Table IIc -- Caroline

LIST OF HIGHEST ORDER CLUSTERS OF THEMES

HIGHEST ORDER CLUSTERS	**HIGHER ORDER CLUSTERS OF THEMES**
A. Stress	Marital difficulties (get upset) Struggle (getting up) Responsibility (were perfect)

B. Health	Mental Status (concentration) Physical Status (headache) Decreased Awareness of Self (being choked up)
C. Social	Isolation (I quit this, I quit that) Relationship Roles (life falling apart) Increased Awareness of Self World (down and yucky feeling)
D. Body Needs	Reaching Out (needed pills) Physical State (just sleepy)
E. Coping	Marital Difficulties (often about my children) Reflection Past (could be crying) Personality Feature (my house was perfect) Mental Difficulties (it just haunts me) Struggle (effort to get myself dressed)
F. Low Self-Confidence	Frustration (it's frustrating) Isolation (burnt out) Struggle (verbalizing) Mental Status (guilty)
G. Healing	Awareness of Time as a Cyclical Process (in the summertime is easier) Change (flowers) Reaching Out (doctors)

This table is a list of themes clustered from Table IIc. It is a higher level of clustering intended to cast more light on Caroline's experience with SAD.

The first theme stress reflected her perceptions of the situation as related to SAD. The most stressful experience for Caroline was indicated in three categories -- marital difficulties, struggle and responsibility. All three categories were closely interconnected. She experience failure to manage "perfectly" her home. She could not become involved with activities. When she was unable to cope with a situation coping she experienced a struggle in every aspect of her daily functioning. Furthermore, she felt unappreciated by her husband. This non-affirming response was an additional negative factor in her stressful situation.

Finally, her daily effort to perfectly manage her marital and family life drained her, and became a stressful experience. This eventually negatively affected her health. She experienced more disturbances in both mental and physical aspects of her health. Panic was a major issue (I couldn't breath, I couldn't sit, I couldn't lie). This disturbance turned her further away into a more distant and isolated world - social.

The list of themes in this table shows that Caroline's daily stressful experience covered most aspects of her life. Additional exploration of how Caroline's husband perceived their relationship and her depression would be helpful in clarifying aspects of their marital relationship.

It appears that the most disturbed aspect of Caroline's world was her interpersonal relationship, especially her marital relationship,which was a crucial element in intensifying this disturbance.

Caroline's experience of helplessness as she tried to cope with her condition body needs combined with her isolation contributed to her further isolation and lower level of confidence. According to Caroline, her stressful situation was present to a lesser degree in the summer seasons - healthy and following light therapy. From the data analysis it appears that if Caroline was in a more satisfactory marital relationship she may have experienced less depressive episodes overall. Consequently, her struggle with getting up in the morning may have been less debilitating than reported. Caroline noted that while she felt better emotionally during the summertime, a difficulty that persisted throughout the year was her struggle with getting up in the morning.

Table IIIa - Paula

THEMATIC SUMMARY

THEMES EMERGING FROM PROTOCOL	INSTANCES (EXCERPT FROM PROTOCOL)	# Paragraph
1. Fall	Like I started feeling sick probably in October, November	1

2. Winter	But it gets so ridiculous during the winter, that I can't recognize myself	102
3. Summer	The summers were better but still not normal. The headaches never disappeared summer or winter	19 17
4. Pastime	Well, I was completely fine before we moved to Calgary. When I was about 19 I had my appendix removed. That was a mistake. I was milk intolerant and the pain was still there. I didn't achieve anything in my life.	1 136 110
5. Fatigue	I am tired all the time.	109
6. Sleep	I didn't want to do anything except sleep.	1
7. Present time	I have a headache and my stomach is always upset.	161
8. Getting up	I just don't get up (in winter). No, there is no way I am going to get up at 6:00 a.m.	21 98
9. Confusion	The headaches I still have and nobody knows why.	19
10. Headache	Everyday I have a headache. Well, they are like migraines.	35, 41
11. Misunderstanding	I went to the doctor and he said well it's probably stress	1
12. Drugs	There wasn't a day that I didn't take at least 10 pills. I've been medicated to death	32 19

13. Reflection on Physicians/ anger	They are not interested! All of them were quite careless and negligent and they didn't care.	129 17
14. Trust	I see one doctor and then I check with the other one and I think, well, if they agree maybe they are right. So I changed doctors.	161 7
15. Feelings	I feel sad. I'd cry all the time.	102
16. Self-observation	I was sick most of the time with headaches, tired. Pains here, pains there. Constipated. With rashes. I was throwing up like day and night. I'm really sensitive to all drugs. Aspirin can not even smell it.	16 25 33 53
17. Helplessness/ despair	I thought I was going to die or something. I said well, if I don't quit (my job), they are going to fire me.	4 109
18. Search for Solution	... I have tried getting up earlier. I have changed just about everything. Still a headache.	47 72
19. Perception of Condition	I really thought I was going crazy, because nobody seemed to find anything wrong with me.	16
20. Somatic	I have nausea and abdominal pain. I started throwing up nonstop I lost a lot of weight	38 23 25

21. Fear	I got very scared	109
22. Lack of Energy	I wanted to sleep and I felt like doing anything	109
23. Guilt	I feel really bad if I can't work my 40 hours. He (husband) still like me but I feel bad.	111 152
24. Professional work	I had to quit my job. I just couldn't handle it anymore.	107
25. Social Withdrawing	Like during the winter I don't want to talk to anyone. I didn't want to be bothered with anything. During the winter he (husband) just stays away from me.	118 105 105
26. Household	During the winter I didn't do anything. Nothing.	106
27. Sex Life	During the winter I just don't feel like it. I just want to sleep, leave me alone, I'm not here.	146
28. Reflection on husband's perception	I was very scary, because he thought that I was going either crazy or I was dying. It's getting really hard for him.	105 143
29. Marital relationship	He tried to pay attention to me. He wanted me to go out. It's been so hard to live with me the last few years.	105 152
30. Positive Change	And through the summer, it wasn't all that bad. Well, instead of crying five times a week I'd cry only two (after therapy) I started exercising again	1 177 164

31. Light Therapy/hope	But this winter wasn't all that bad, because I had the light. Like the mood became different	105 175
32. New Motivation/hope	Well, if this is SAD, I am going to have an improvement after light therapy	76
33. Self-treatment	And we look just about everywhere for a light meter. We made our own lamp in the house I switched them (lights) in the morning instead of evening	79 77 87
34. Rationalization	So it's not very clear if it's your SAD or it's a combination of SAD and something else. Or not SAD at all.	100

The above list of themes that emerged from the protocol indicates Paula's perception of SAD in her everyday life. The number of themes listed (for example, Winter, Summer, Fall, Fatigue, Lack of Energy, Inability, Sex Life) confirms the findings of other researchers who investigated and described clinical symptomatology of SAD (Rosenthal, 1987; Wehr, 1989). The theme Pastime indicates that Paula's perception of her mood disorder is clearly time related (I was completely fine before we moved to Calgary 5-6 years ago). Except for this past year (when Paula started to use light therapy) she experienced a gradual worsening of her condition and consequently was unable to perform her everyday activities - Household, Professional work (I had to quit my job). Though she experienced some improvement of her condition during the summer seasons her suffering was experienced throughout the year - getting up, headaches, drugs. A more detailed perception of Paula's condition was reflected in the theme Self-observation (I was sick most of the time, with headaches, tired, pains here, pains there, constipated, with rashes. I was throwing up like day and night.) She was unable to stop crying and began to feel desperate (I thought I was going to die or something). This led to a fear for her life - Fear. Furthermore, she had a negative experience with her physician which left her in an uncertain situation - Confusion (I was not knowing what was wrong with me). Paula felt guilty about her inability to manage her difficult situation - Guilt (I feel really bad). She reflected on her marital life in the themes Marital relationship and Reflection on husband's perception. (It's been so hard to live with me the last few years. He thought that I was going either crazy or I was dying.) She felt misunderstood when her physician made remarks such as "It's probably stress". Those comments nevertheless spurred her on in her search for a solution to her problem - Search for solution. (I have changed just about everything, I went to the library).

As soon as Paula learned about SAD she experienced a renewed hope for recovery - Hope (Well, if this is SAD, I am going to have improvement under light therapy). In retrospect she realized that her mood was dependent on the daily amount of light (What really gets me is the lack of light). Consequently she became more motivated to begin treatment - new motivation (and we looked just about everywhere for a light meter). Her previous negative perception of her physician's attention, as reflected in the theme pastime (that was a mistake, my appendix should not have been removed), combined with her present perception of physicians as careless motivated Paula to focus on Self-treatment (We made our own lamps in the house). Though Paula experienced some improvement - Positive change (Well instead of crying five times a week, I would cry only two) in her condition following light therapy she continues to experience suffering - Reflection on present time (Everyday I have a headache and my stomach is always upset). While she presently experiences a decrease in her despair and guilt about her condition, and less apprehensive about physicians, her doubts about the diagnosis of her illness continue to challenge her - Rationalization (It's not very clear if it's your SAD or it's a combination of SAD and something else or not SAD at all).

Table IIIb -- Paula

A LIST OF HIGHER ORDER CLUSTERS OF THEMES

HIGHER ORDER CLUSTERS OF THEMES	**THEMES EMERGING FROM PROTOCOL**
a. Awareness of time as a cyclical process	Winter, Fall, Summer, Sex Life, Reflection on past time
b. Communication with physician/trust	Reflection on physicians, misunderstanding
c. Effort	Getting up, professional work, household
d. Physical status	Headache, somatic, sleep
e. Sense of Self	Fear, perception of condition
f. Anxiety feature	Self-observation, Perception of condition, present time
g. Mental Status/ Insecurity	Confusion, fatigue, guilt, helplessness, despair, lack of energy, inability
h. Reaching out	Search for solution, drugs, light therapy

i. Isolation	Professional work, sleep, inability, social withdrawing
j. Marital life	Reflection on husband, sex life, guilt, household, present time
k. Hope	Light therapy, positive change, new motivation, Rationalization

This higher order list of themes demonstrates the more complex picture of Paula's daily experiences with SAD.

The theme Effort reflects the three most difficult tasks experienced for Paula; from getting up from bed in the morning, to fulfilling her professional duties on her job and to fulfilling her household activities. She continues to experience a daily struggle related to her persistent headaches (I take about 9 Tylenols a day) and abdominal problems (I started throwing up nonstop) - Physical status. Consequently, she fears every new day - anxiety feature (I really, I thought I was going crazy, because nobody seemed to find anything wrong with me.)

Paula's perception of the condition did not change after she was seen by several medical professionals. She perceived them as careless and consequently lost faith in them. (What I do is, I see one and then I check with the other one and I think, well if they agree maybe they are right) - Communication with physician/trust. Her hopeless perception of her condition left her in an insecure state, (Insecurity) with much guilt for her inability to manage her situation. Consequently she felt even more tired and despondent - Marital status in her own world - Sense of self. Fear became the main component of her daily life (I got very scared). Feeling unable to compete with the speed demanded by events from the outside world she felt that only through sleep could she survive - Isolation. Though Paula reflected on the help offered by her husband (He tried to pay attention to me, he wanted me to go out) she did not feel relief from his assistance. In addition she perceived her marital life to be jeopardized - marital relationship (But it's getting really hard for him. Sometimes I don't understand why doesn't he divorce me and look for someone else). The perception Paula had of her condition changed with the seasonal changes, winter worsening and summer improving (the summers were better but still not normal. Her headaches did not ease up in the summer nor in the winter. In summer I still need to sleep a lot and I get tired very easily.) - Awareness of time as a cyclical process.

Every year Paula sought help in the hope of relieving her "terrible headaches" - Reaching out. She perceived this task as very difficult. Feeling disappointed by professionals (I felt very upset and disappointed and frustrated with all doctors) she felt isolation. She searched alone for solutions (I've tried getting up earlier, I changed what I eat, I started exercising, I quit smoking for 3 months). Her experience with a light therapy treatment program changed her perspective on her recovery. She felt better physically and mentally (Like I was not so tired. I didn't feel as depressed.) Consequently she became more hopeful - Hope - and motivated. (I put all these lights in front of me. I switched lights on in the morning.) The hope Paula gained for recovery with the help of light therapy contributed to her more positive perception of physicians, especially those who were involved with the light treatment program. (That was kind of him that he was able to see me in three months instead of nine months).

Briefly, this section indicates that Paula's everyday life is deeply disturbed by her disordered mood. Though she experienced less depression during the summer seasons and following light therapy, her physical symptoms, such as headaches, increased need for sleep and increased tiredness were present regardless of the time of the year. Paula's perception of her marital life indicates that her family life might be negatively affected by her depressive mood.

Table IIIc -- Paula

LIST OF HIGHEST ORDER CLUSTERS OF THEMES

HIGHEST ORDER CLUSTER OF THEMES	**HIGHER ORDER CLUSTER OF THEMES**
A. Health	Mental status (fear, guilt, upset) Sense of self (going crazy, going to die) Physical status (headaches, stomach difficulties)
B. Body Needs	Physical (sleep, weight) Reaching out (drugs, light therapy)
C. Chronic Symptoms	Anxiety feature (sensitive to all drugs) Physical status (headache)
D. Coping	Reflection on present time (having difficulties coping) Marital relationship (feeling bad) Effort (just don't get up, doing anything at home, quit a job) Awareness of time as a cyclical process (I can't recognize myself)

E. New Perspective	Hope (after light therapy - the mood became different) Search for solution (exercising again)
F. Low self-confidence	Insecurity (it's not very clear) Marital Life (hard to live with) Professional work (couldn't handle it anymore) Reflection on pastime (I didn't achieve anything)
G. Struggle/ Discomfort	Communication with doctor/trust (all were careless and negligent, they don't care) Insecurity (Nobody knows why)
H. Social	Marital life (I am not here) Isolation (not to be bothered by anyone) Communication with doctor (careless/negligent)
I. Sense of Loss	Awareness of time as a cyclical process/reflection on past (completely fine 6 years ago) Sense of self (I thought I was going to die)

The table of themes here represent the highest order of clustering, therefore the most complex picture of Paula's daily experiences with SAD.

The theme Health indicates that Paula suffered from disturbances in all 3 aspects of her existence. Paula's disturbed physical status (chronic headaches and abdominal pains) was perceived as the most disruptive, and most responsible for her. Because of her inability to function normally. She felt hopeless to relieve her headaches and this perception left her in such an isolated world - sense of self - that she feared for her own life. The theme chronic symptoms indicated that Paula experienced everyday headaches which she was unable to relieve by "a massive amount of medication". In addition, she experienced a gradual worsening of her health after she felt hypersensitive to "most drugs" (I've been medicated to death, I'm really sensitive to all drugs and yeah, they helped my headaches but they make my stomach worse). Except for sleep - Body needs - she noted that she was unable to do anything. Reflecting on her present suffering and her life generally, she felt she was a complete failure. (What I achieve in my life? Nothing.) During her most difficult periods of depression she felt that there is only one way to deal with her suffering - to become isolated from the outside world and attempt to survive by slowing down in her own world - coping. (I just don't get up, I am doing nothing at home. I just quit a job.) Her isolation did not relieve Paula's suffering. She felt even more a sense of failure which contributed negatively to her self-confidence.

Her poor self-perception conversely negatively affected her relations with the outside world - Social-(marital life, communication with doctors).

Furthermore, Paula's negative perception of physician's care and perceived insecurity in communication with them (Nobody knows why I am sick) - discomfort - further contributed to intensifying the negative experience of her disorders.

Hope for her recovery gained through the use of light therapy changed Paula's perception of her condition, however her major physical symptoms such as headaches persisted.

Briefly, the highest order list of themes on this table indicates that in Paula's life there are some experiences which should be further explored. It seems that Paula's most terrifying experience in her suffering are persistent headaches which incapacitate her in living "her normal" life. Her headaches however, often combined with other physical symptoms, such as abdominal pains and observed hypersensitivity to drugs might indicate her persistent anxiety. This specific feature is often linked to depression (Ruben, 1992). Furthermore, Paula's regular daily "enormous" intake of painkillers used to relieve her headaches indicates that she might be addicted to them. This addictive use of medication may intensify her problem by creating headaches rather than relieving her from them. A further exploration of Paula's self-treatment by analgetics may shed light on her problem. The findings from this study indicate that Paula may be suffering from withdrawal headaches recognized as analgetic - rebound headache (Davis, 1992). This type of headache might exist in people who may have had infrequent headaches in the past and they gradually increase their analgetic intake in some stressful life situations. Over time they reach a point where unless they take the analgetic daily, they suffer from headaches which represent a vicious cycle of their suffering (Davis, 1992). Because headaches can contribute to depression and conversely depression can contribute to headaches a further vicious cycle might exist in Paula's suffering. Further exploration of Paula's habit of drinking coffee daily is also important. Drinking a large amount of coffee daily might affect her in a similar way as large amounts of analgetics which means getting a withdrawal type of headache after not taking a daily large amount of coffee.

Finally, it seems that her husband's perception of her disorder should be further explored. The themes indicate that Paula's husband's perception of her suffering (he is really scared. He thought I am going to die) might greatly contribute to her anxiety and therefore negatively affect her recovery.

Table IVa -- Glenda

THEMATIC SUMMARY

THEMES EMERGING FROM PROTOCOL	**INSTANCES (EXCERPT FROM PROTOCOL**	**# Paragraph**
1. Time	There is only about four months a year where I feel really good.	(109)
2. Weather	I think its whenever there's less sun and when it's a darker day.	(9)
3. Psychotherapy	I had been seeing a psychologist on a regular basis every two weeks	(1)
4. Search for conclusion/ hope	I realized that I needed to do something	(60)
5. Seasonal	Winters were always hard to get through	(108)
6. Confusion	I couldn't understand what was happening to me	(156)
7. Identity/loss	I really did not have a sense of who I was	(6)
8. Feelings	It's dark. It feels like a dark time. I am just a failure.	(10) (28)

9. Metaphors	I feel drained	(56)
	I really felt I was sliding	(9)
10. Drugs	I've been on and off anti-depressants probably for at least a 20 year period	(12)
11. Panic Feeling	I really felt panicky about it	(9)
12. Fear	I just dreaded the day.	(54)
	It was terrifying	(61)
13. Guilt/Self blame	And I blamed myself for it	(177)
14. Inner Resources	I had learned about myself and coping mechanisms from evening hospital	(16)
15. Awareness of a need for light	It's so dark here - I needed light. I could no longer stand anything because dark	(13)
16. Anger	I was so angry	(65)
17. Physical Illness	I find that in the last couple of winters have become increasingly difficult to maintain any level of activity	(123)
18. Self-observation	I felt I had a fresh lease on life	(76)
19. Helplessness/ frustration	I had nothing to offer anybody	(66)
20. Lack of Energy	Everything is an effort	(20)
	I was exhausted	(65)
21. Inability	I couldn't function at all	(25)
22. Sleep	... And then I feel sleepy and I just want to hibernate	(22)
23. Fatigue	I am just constantly tired	(11)

24. Appetite	I just can't get enough carbohydrates	(22)
25. Rationalization	Like I would not attribute all of my depression to SAD	(1)
27. Progression	... It grew increasingly hard and harder	(53)
28. Getting Up	that was the hardest part, getting started	(154)
29. Respect/ Appreciation	The (husband) has always respected me for who I am	(23)
30. Self-discovery	So I started to get in touch with a creative part of myself	(66)
31. Childhood	I was labelled when I was young as lazy ...	(18)
32. Self-appreciation	I value who I was	(18)
33. Household	Like we enjoy doing things together and so we do the housework together	(168)
34. Heightened Enjoyment	It was wonderful (to work with people for the newspaper)	(66)
35. Family	So I have dinners whenever	(133)
36. Friends	And my friends were very supportive they were delightful	(41) (66)
37. Children	I think it was very scary for my children but they were very supportive	(41)
38. Husband	He was always gentle and patient	(153)

39. Independence	I could approach nursing in a fresh way. I wouldn't get hooked into a lot of the old unhealthy behaviours that I've known	(103)
40. New Insight	... I learned what that was and came to some understanding	(12)
41. Improvement	I've learned to like my life on a different, in a better way with therapy	(76)
42. Change	... It really made a difference last winter	(90)
43. Marriage	... that's the best part of it	(115)
44. Communication	And he (husband) was able to hear that	(97)
45. Financial worries	It's the loss of that cushion that makes him feel uncomfortable	(99)
46. Routine	I knew that I had to get up and get organized and so I would approach it just by saying well you can get up now	(16)
47. Trust	... my husband and my sons and my good friends were consistently there for me. I trusted his (doctor) integrity	(50) (62)
48. SAD News	And it was right after that that my brother was involved with the murders and I just, I was deeply impacted by that	(76)
49. Motivation	It was really exciting and they told me you have to be creative	(67)

The number of themes in this table reflects Glenda's perception of SAD in her everyday life. Though she experiences her down mood periodically every winter (most around Christmas time) - seasonal - a summer cloudy day weather negatively affects her mood as well. The themes feelings and metaphors demonstrated Glenda's great suffering (It's dark, it feels like a dark time ...). In addition, the theme panic feeling reflected her increased suffering, complicated by anxiety as she became aware of the coming depressed mood. This was followed by her inability to perform her everyday life tasks (I can just remember thinking I'm just a failure). Other themes, such as Lack of energy, Fatigue, Appetite for carbohydrates, Sleep, (I just want to hibernate) demonstrated characteristics of SAD found by other researchers.

Glenda's most difficult experience related to starting a day - getting up. (That was the hardest part, getting started). Though she experienced understanding and support from family members - children, husband - her lack of energy combined with professional demands at her workplace, forced her to quit her job as a nurse - professional work (I could not function in nursing). In her isolation, Glenda felt helpless - helplessness/frustration - as she experienced no insight into her condition. Consequently, she felt confused - confusion - and experienced the loss of her own identity (I really did not have a sense of who I was). In addition she felt guilty about the whole situation - guilt/self-blame. Furthermore Glenda experienced another type of loss - physical illness. She lost pleasure in being able to walk outside after she was diagnosed with osteoarthritis. This in turn contributed even more to her helplessness, and Glenda experienced simultaneously worsening of her depression and osteoarthritis - progression. In her desperate state she feared every new day. While she quit her job as a nurse she had difficulties in fulfilling her home responsibility. In her darkest moments however, she experienced some relief as she felt comforted in that she was able to manage her day in relying on the coping skills she learned during a previous therapy - inner resources (So I used those same coping skills ... I just had to kind of take the day apart like). In addition, with Glenda's husband sharing household chores she was given a sense of understanding and appreciation. This in turn contributed to more trust and improved communication between them. With the help of the psychotherapist, she experienced an understanding of her childhood identity (now I value what I was).

A new perception about herself was Glenda's source of additional healing. Her previous positive experience with a psychotherapist combined with her husband's support encouraged her to undergo further therapy wherein she found a new enjoyment in her life (So I get in touch with a creative part of myself). Consequently she felt motivated - motivation - and her mood positively changed - self-observation (I felt ... I like I had a fresh lease on life).

Glenda experienced a reversal in her mood, she became depressed when she learned the news about her brother's criminal activity - bad news.

Learning from her previous positive experience that her life can be enjoyable again, Glenda did not lose all hope during this period. Though she felt depressed she was able to keep her positive attitude and reached for help again. A perceived trust between her doctor and herself from her previous therapy (I trusted his integrity) was an important factor in her new look on life. In addition, learning about SAD gave her a new insight into her condition and she stopped blaming herself for depression. After she and her husband rebuilt their house and installed many lights in the rooms she felt even more energy and therefore more hopeful. Consequently she felt more independent - independency (I could approach nursing in a fresh way).

All these changes positively affected her marital relationship. Though Glenda and her husband spent a lot of money renovating their home, which brought more light inside - financial worries - it seemed that they both experienced satisfaction and pleasure from her improved health. Consequently, this contributed to the more enjoyable marital relationship - marriage (that's the best part of it ...). Finally, with Glenda's understanding of her SAD condition, reflected in the theme rationalization (Like I would not attribute all my depression to SAD) she was able to deal more effectively with her condition.

Table IVb -- Glenda

LIST OF HIGHER ORDER CLUSTERS OF THEMES

HIGHER ORDER CLUSTERS OF THEMES	THEMES EMERGING FROM PROTOCOL
a) Awareness of time as a cyclical process	Seasonal time
b) Relapse	Weather, bad news
c) Mental Status	Helplessness/frustration, fatigue, inability, fear, anger, guilt, progression, lack of energy
d) Reaching out	Psychotherapy, doctor, drugs
e) Increased awareness of self	Metaphors, feelings, panic feeling
f) Awareness of support (Social roles & positive perception)	Doctor, family, friends, marriage, communication, new insight, inner resources, trust, respect, self-appreciation
g) Insecurity	Confusion, identity/loss, financial worries, self-blame
h) Unfinished business	Identity, childhood
i) Physical status	Physical illness, appetite, sleep
j) Increased self-esteem	Independence, self-discovery, self-observation
k) Struggle	Getting up, routine, household, professional work
l) Loss	Identity, physical illness
m) Improvement	Heightened enjoyment, change, rationalization

This higher order list of themes (Table IVb) reflects Glenda's suffering from SAD in a more complex way.

The theme Awareness of time as a cyclical process indicated that Glenda perceived periodically every year a seasonal change of her mood. She felt however that besides the seasonal sunlight variation the lack of daily light regardless of the season, hearing of painful news, affected her mood in a similar way - Relapse (And I just, I was deeply impacted by that). Both themes such as Mental Status and Physical Status reflected Glenda's deep suffering. She felt immobilized because of the lack of energy. Consequently she feared a new day (I just dreaded a day). Her everyday life became a struggle for Glenda and she felt unable to fulfil her working commitments. In addition, she felt helpless in resolving her dilemma. This, in turn, brought her more confusion and she started to blame herself for this condition - Insecurity. Inability to perform her professional work was an additional adverse factor in Glenda's insecurity. Though she felt some relief by remaining isolated at home having a lot of sleep and maintaining a carbohydrate diet - Physical status, she simultaneously experienced a loss of her own identity. In her effort to find a solution she explored her past life and recalled being misunderstood as a child - Unfinished business (I was labelled when I was young as lazy). This reflection contributed even more to her insecurity and consequently she perceived her condition as progressively worsening. She felt isolated with her own feelings and in a world of her own - Increased awareness of self. Despite her desperate situation, Glenda experienced much understanding from her husband and children. Her previous positive experience with a psychotherapist helped her to revive the trust she once had with her physician - Awareness of support. This in turn brought a new hope to her darkness. Consequently, Glenda was ready to undergo therapy - Reaching out. During treatment she discovered more insight into her childhood and learned that she could enjoy life in a new way. She felt more independent and this positively contributed to the building of her self-esteem. In addition, she became more motivated in her world around her and experienced a positive effect of light on her mood - Improvement.

Finally she felt that a combination of a new insight into her childhood, light therapy, as well as her supportive family environment changed her life. Consequently she felt more secure about herself.

This section indicated that Glenda's everyday life was deeply affected by her suffering from depression. Furthermore, it seems that Glenda experienced the same difficulties on any dark day during the year which could indicate her increased vulnerability to a lack of light. The themes here reflected that Glenda is caught in a vicious life cycle. It appears that Glenda perceived the support and appreciation from her husband was an important factor to break out of this negative cycle. In addition, a trustful relationship with her physician played a significant role in her ongoing recovery. Both above mentioned factors helped her to increase her self-esteem and give her hope for recovery. Finally, the combination of light therapy and psychotherapy reduced her suffering.

Table IVc -- Glenda

LIST OF HIGHEST ORDER CLUSTERS OF THEMES

HIGHEST ORDER CLUSTERS OF THEMES	HIGHER ORDER CLUSTER OF THEMES
A. Stress	Struggle (getting up) Relapse (weather, seasonal)

B. Health	Mental status (lack of energy) Physical status (diet, sleep, physical illness) Increased awareness of self
C. Body Needs	Reaching out (drugs, light) Physical status (carbohydrate diet, sleep)
D. Increased self-confidence	Increased self-esteem Awareness of support
E. Need for Solution	Unfinished business Identity Childhood
F. Coping	Awareness of support Increased self-esteem Loss
G. Healing	Improvement Reaching out Awareness of support Increase of self-esteem

The themes in this table represent the highest level of clustering and provide us with a more complex picture of Glenda's suffering from SAD in her everyday life.

The theme Stress included categories such as struggle and relapse. It reflects her stressful experience with managing her normal home and professional activities during the period of her depression. While Glenda was aware of her duties to perform her daily tasks when she awoke in the morning, her need to attend to her body through sleep took priority. This inability to fulfil her duties led her to feel like a failure so that getting up in the morning became the most stressful period of her daily life.

The theme health reflects all three aspects of her existence (mental, physical, and self) were disturbed and negatively fed into each other. While her mental state reflected a lack of energy and lack of concentration, her physical mobility slowed down and Glenda's perception of her osteoarthritis became more negative. She limited her walking and this in turn negatively affected her mental state. She felt more helpless and frustrated. With reference to this perception of the worsening of her physical and mental status, Glenda became more aware of her isolated world. Consequently as Glenda focused on herself, her mental and physical state became even more dependent on each other. A repetitive pattern of Glenda's negative perceptions surfaced. The awareness of her husband's and medical professionals support brought her a hope for her recovery. This contributed to the breaking of the repetitive pattern. As Glenda felt the therapeutic effect of light on her mood she experienced more hope. Finally finding her own identity helped her to increase her self-esteem. Though Glenda is currently searching for her biological mother, she feels more secure about herself. In addition, the discovery about her own creativeness increased her motivation to seek more enjoyment in her life. Consequently she feels she is able to cope with her disorder in a better way. This reflects Glenda's new, healthier pattern of her perceptions regarding her everyday life which reflects a healing process. That is, a positive cycle replacing the negative cycle.

The following table (Prelight Period) represents an across co-researchers' themes analysis in order to reflect on their most common experiences as they relate to the original question in this study "What is the everyday experience for a married client diagnosed with SAD?". The themes on this table are represented by co-researchers quotes. There is an expectation that by using quotes or better understanding of co-researchers' experiences will be achieved.

Insert Table V About Here

Table V

ACROSS CO-RESEARCHERS ANALYSIS OF THEMES
(PRE-LIGHT THERAPY EXPERIENCES)

		BONNIE	CAROLINE	PAULA	GLENDA
HEALTH	MENTAL STATE	I felt really fragile ned and dreaded the winter. It got progressively worse	It felt like darkness was around me. It got progressively worse	I fell sad. I would cry all the time	It is like seeing the The world through a dark veil. It grew progressively harder.
	PHYSICAL STATE	I had lost about 20 pounds over a period of 6 weeks	I was just sleepy No energy	I have daily headache and my stomach is always upset. I lost weight	It became increasingly difficult for me to maintain any level of activity.
	SELF	I felt like I was drowning in quick sand	I felt like something was swallowing me up.	I thought I was going to die	I really felt I had this sinking
RELATIONSHIP	FAMILY MEMBERS	He (husband) gets really ticked off with me and angry. It's really scared him	He (husband) is negative. He sees it as always laziness.	He (husband) was scared. He thought I was going either crazy or I was dying.	He (husband) was always gentle and patient. He and my children were consistently there for me.
	PHYSICIAN	I had some reservation about therapy because I didn't know if I really trusted him.	They thought you are under stress. Recently I saw doctors more often.	They said this is stress. All of them were quite careless and negligent and they don't care.	And my doctor was a wonderful person. I trusted his integrity.
COPING	HOME	I've been able to carry on and do things though I had to sort of shut down a while.	It's almost like I am standstill with everything	I didn't do anything.	I knew I had to get up I just used the same coping skills I learned before
	WORK	I quit my job.	(homemaker)	I had to give up my job.	I quit my job.
STRUGGLE	ROUTINE	It was an effort to get up in the morning. I had to fight every step of the way at Christmas.	It was a major problem getting up. Usually Christmas time I collapsed anyway.	I just don't get up. It's Christmas time - I'd start crying.	Getting up that was the hardest part getting started. December is my worst time. Christmas time is a bad time.
SELF CONFIDENCE	GUILT	I was really afraid that I was doing damage.	It's like a great handicap being so down.	I feel bad though it's not my fault.	I blamed myself for my feelings.

This table notes some similarities among all co-researchers as they reflect on their health disturbances. These disturbances were perceived in three basic components: Mental, Physical and Self. Feelings of apprehension and fear combined with feelings described "like one living in darkness" were common among co-researchers during their depressive period. Furthermore, all co-researchers shared the same experience of losing control regarding their situation. They illustrated their hopeless perception by using a number of similar metaphors (self). Here their shared experience of fear and isolation became a major component of their suffering. In addition they all perceived their disorder as getting progressively worse. In the subcategory "physical" co-researchers' common experience was the weight problem (loss or gain) and sleepiness. Furthermore, supersensitivity to drugs, food and/or environment was another common experience for two of them. The experiences of each co-researcher under the theme Health indicates an importance of interaction between mind and body. They all shared experience that as their depression progressed their body was losing its usual functional status. For example, Glenda was one co-researcher whose physical illness (osteoarthritis) might have been magnified by her winter depressive mood. All co-researchers perceived themselves as inadequate in the fulfilling of their professional duties - coping - so they quit their jobs. Across co-researchers, coping mechanisms at home differ. It seems that when co-researchers perception of home care includes a component of responsibility of doing things every day (especially in families with children), they are able to do some minor activities. It is this author's view that those simple activities might reduce their negative self-image which is for the most part based on their general perception of their inability to function. The common theme struggle indicates that each co-researcher suffered at performing daily activities though the struggle sometimes differed from each other (driving, self-care, reading, simple tasks at work) they all related to the routine activities. This theme is therefore related closely to the theme Health and reflects co-researchers psychomotor retardation. All co-researchers perceived themselves as failures following their inability to perform their routine work. Furthermore, their negative self-image combined with their cognitive confusion about the disorder contributed to the experience of guilt. Blaming themselves was a common coping mechanism among the co-researchers. It seems that marital relationships were perceived by all co-researchers as a very important aspect of their life - Relationship Roles. When asked about their family life they all reflected mostly on their husbands. They thought of their husbands' fear, misunderstanding and of some hostility directed to them because of their disorder. One co-researcher (Paula) reflected on her husband's "support" to such a degree that they both feared that the co-researcher was going to die.

These above mentioned findings indicate that maladaptive behavioral patterns might be common in families when a member is suffering from SAD. It seems that the family environment might play an important role in the process of each co-researcher's recovery. It seems that a positive marital perception by one co-researcher (Glenda) was an important contributor to her recovery. Most co-researchers described in negative terms their relationship with their physicians. Nevertheless, their experience showed qualitative differences. While they generally experienced a lack of trust in their physicians, they nevertheless admitted the need to communicate with them. One co-researcher who perceived her physician in an almost "hostile way" showed the least improvement in her health following the light therapy. Data indicate that a trustful physician/patient relationship might play an important role in the co-researcher's recovery. Without exception they all experienced a lack of understanding by others during their depressive period and they felt confused themselves about it. It seems that the additional disappointments by their physician's care magnified their confusion and added to self-blaming about the disorder.

Insert Table VI About Here

Table VI (Post-Light Therapy) shows the most common across co-researchers' experiences after they experienced light treatment.

The themes Healing and Persistent Difficulties indicate that all co-researchers felt some improvement following the light therapy. However there were differences in their qualitative perceptions. The weakest to improve from SAD was Paula (daily headaches,

Table VI

ACROSS CO-RESEARCHERS ANALYSIS OF THEMES
(Post-Light Therapy Experiences)

		BONNIE	CAROLINE	PAULA	GLENDA
PERCEPTION OF CHANGE	HEALING	I feel like I gained 3 months a year.	I just felt like darkness just lifted off me	Instead of crying five times a week I'd cry only two.	I got back my positive perceptions
	PERSISTENT DIFFICULTIES	Occasionally I felt like I had regressed. You just wake up in the morning and you are down.	I might have difficulty to communicate to verbalize. Getting up in the morning.	I have still headache and abdominal pains. I have problem to get in the morning, am I am easily tired.	The life is improving in all aspects.
	LIGHT TREATMENT	The Prosac and the helmet are the only things that have really changed.	It's difficult to see pictures from everything, thyroid problems or stress or bad marriage or SAD.	So it's not very clear if it's your SAD or it's a combination of SAD and something else or not SAD at all.	I would not attribute all my depression to SAD but certainly complicated by depression that was due to all kinds of events.

gastrointestinal problems, getting up in the morning, difficulties and easily tiring). This might indicate that she does not use her light therapy appropriately (self-treatment) or her SAD might be complicated by other interacting factors. She may be refractory to light therapy. An insight gained into Paula's everyday life by this phenomenological approach indicates that aversive interacting factors with SAD may play an important role in her suffering.

The data on this table indicate that getting up in the morning was a very common persistent problem for co-researchers despite their improvement in most aspects of their daily life.

Briefly, it seems that all co-researchers reflected on improvement of quality of their life after light treatment. It is important to note, however, that by gaining knowledge about SAD before light treatment, all co-researchers experienced new motivation and a less helpless attitude to their disorder. This cognitive change further positively affected their motivation for new treatment with light. This researcher makes two observations from the data, one, lack of a "pure" diagnosis without other contributing factors in the clinical picture, and second, the lack of light as being responsible for their mood disorder was comforting insofar as it took away a stigma of being labelled psychosomatic.

To summarize, the main experience of the co-researchers' suffering was a low self-confidence as they went through their SAD period. It seems that self-blaming was a common reaction to the above mentioned experience. A global look on all co-researchers' experiences as represented by themes in Table V reflect that they all shared a similar pattern of experiences whereby a vicious cycle establishes itself. This common, or general pattern of experiences of depressed mood combined with a low energy level impaired concentration and psychomotor difficulties. There was increased sleep during the day. It is ironic that while they needed more light for recovery their response to their depressed mood was to isolate themselves and this took the form of retiring to their bedrooms, a place that had poor daily light. This vicious cycle contributed to their low self-confidence. This author's general observation was that all co-researchers contributed to this vicious cycle. Because of the variation in how each co-researcher played into this vicious cycle, treatment should be individualized.

V. SUMMARY OF THE STUDY

The findings of this study indicate that SAD diagnosis might be heterogenous. That is while some patients might completely recover under light therapy (Bonnie), others might benefit from additional treatment (Caroline, Paula). In order to find the most appropriate treatment for each patient a careful patient's pretreatment history is important. This study indicates that SAD when augmented with other psychopathology (anxiety, drug dependency, etc.), might decrease patients' recovery under light treatment.

It seems that the winter season was perceived by all co-researchers as a very stressful period of the year. While the quality of life for all co-researchers was perceived as improved by light therapy, they indicated qualitative differences in their responses to this mode of treatment. Those co-researchers who indicated less qualitative improvement under light therapy reported more anxiety, maladaptive family behavior (Caroline), over-use of analgetics and less understanding from their physicians (Paula). In addition, similar negative experiences, such as tiredness, difficulty with communication, sleepiness, difficulties year-round getting up in the morning were reported. However, they perceived these problems with less severity during the summer (see Table VI). The above mentioned findings indicate that some negative factors (analgetic overuse, marital maladjustment, striving for perfection) might contribute to perpetuate the cycle of their negative experiences during the summer. Similarly, it seems that additional comarbidity, such as anxiety or possible premorbid personality might interfere with their light treatment response. On the other hand, the possible chronic effects of substance abuse in inducing some psychological illnesses has to be considered (Paula).

Furthermore, findings indicate that fear is a very common experience of sufferers with SAD, however, it has a qualitatively different origin. It may trigger hostile behaviour in their relationship with their physician. For example, Paula's hostile behavior in her relationship with her physician might reflect her fear of death, a fear induced by her persistent headaches. The fear, before light therapy, held by other co-researchers reflected their helplessness at managing their situation at work and fear of losing a job. It seems that detailed phenomenological research as used in this study might help to explore further their fear and to contribute more to their healthier perception by teaching them about their condition. This teaching will contribute positively to their ongoing light therapy.

Theoretical and Practical Implications of the Study

In the light of the findings that are presented as themes in Tables I - VI some tentative implications can be made with respect to helping those suffering from this condition. Tentative is the appropriate word used here since the findings in this study are derived from a limited sample size and a relatively homogenous group (only women participated). Furthermore, the co-researchers were interviewed during the Spring and Summer, seasons of the year that may have an important factor on the type of information presented to the researcher.

The following are implications from this study:

1. Since each individual in this study had an unique pattern, treatment approach and response to the SAD sufferer should be individualized. While a general pattern to the SAD experience as captured in the study (p. 129), themes unique to each co-researcher's daily living are also presented. When

some of these negative idiosyncratic experiences are successfully attended to overall recovery from SAD with the use of light therapy may be more effective.

2. A trusting physician/patient relationship is important in facilitating patient's recovery. Empathy, together with re-assurance are crucial virtues for recovery. Encouragement from a physician is important because it helps the patient become motivated and involved in light treatment.

3. Additional support from a family members is an important component for patients recovery. Identifying existing maladaptive behavioural patterns in the family and changing these patterns to healthy ones will contribute to a patient's recovery. Emphasising to family members that support is more appreciated when patients make an effort to be productive in spite of their negative feelings may further aid their recovery. This kind of support encourages a patient to gain more control over the situation and reinforce the message that they do not have to be helpless and

passive sufferers. This may reduce their anxiety, empowering them to take control of their situation.

4. Other strategies such as thinking and positive self-talk could help set up an additional cycle of reinforcements.

5. Participation in a SAD self-support group in a place where they can share their experiences with other sufferers, can reduce the self-blaming patterns. These self-blaming patterns are usually significant of people living in an emotionally isolated world. Listening to others share their experiences might encourage them to go deeper in exploring their emotional life..

   Since the most difficult time perceived by sufferers with SAD in the sample, is Christmas, participation in a support group at this time of the year might be important.

6. To change their perception of living "under a dark veil" it would be helpful if they use apparel of bright colors, brighten their homes with lights and mirrors and decorate their rooms with light coloured furnishings. The presence of colourful

flowers in a vase on the table can add to their enjoyment.

7. Encouraging them to engage in some creative endeavour, such as, painting, knitting, flower arranging, may elicit an undiscovered talent thereby challenging their negative self-concept. Modification of such lifestyle habits smoking, excessive use of caffeine, overuse of medication, should be considered when planning treatment.
8. Since most physical illness is perceived more negatively by sufferers with SAD thereby increases their depression, an effort be made to treat seriously every disease so as to avoid additional negative experiences in their negative cycle of experiences.
9. An understanding of how sufferers with SAD approach the world around them could further contribute to a greater insight into their condition, thereby contribute to their recovery. The MBTI - Myers-Briggs Type Indicator could help as a tool for this purpose. A change in their approach to the world around them as correlated with light therapy might be and indicator of

reduced depression.

10. Since many environmental factors in the Western World has led to an increase in depression in general, it is perceived by this author that the disorder known as SAD may affect more people in their future. The contributing of social isolation, materialism, and competitiveness are factors that amplify negatively the condition know as SAD.

Implications for Future Research

SAD is a relatively recently recognized entity and research is still at the early stage of development. While traditional experimental research is more quantitative in its characteristic and utilizes different wavelengths, light intensity and timing schedule, future nontraditional research, for example phenomenological research, might help to clarify patients' experiences as related to their everyday life and augment the traditional light therapeutic approach.

The following list identifies some implications for future research.

1. A larger sample of co-researchers with male representation could be helpful to complement this

study. A phenomenological research as used in this study should be performed during the winter and summer seasons in order to find qualitative perceptual differences related to seasonal change of mood. Furthermore, researchers could identify those more painful incidents reported by patients during the winter months so that effort could be made to alleviate their severity by focusing on external life style factors, for example, smoking, drug misuse and general physical inactivity. A positive co-relationship between an increase of some external negative lifestyle factors (frequency of use of cigarettes, consumption of caffeine, and level of depression might be found). A comparatively phenomenological research study involving different countries in the similar geographic areas might help to understand cultural differences as they relate to patient's experiences. It is possible that culture might play an important role in expressing human feelings, however, a lifestyle as adapted by a different culture might interact with light therapy more favorable.

2. Further phenomenological research with a spouse or significant other might complement present research in order to understand the family life from their point of view and to obtain a more complete picture about co-researcher's personality and life style pattern.
3. Because SAD might represent a heterogeneous group of sufferers as related to their personality, for example, the dependent type of personality, perfectionist type of personality, a further quantitative research of personality using assessment scales might help to differentiate SAD sufferers as related to different behavioral patterns.
4. Medical professionals practise of neuro-psychological assessments with SAD sufferers with a focus on their mental, motoric and laterality functioning should be encouraged to understand seasonal mood changes and its relationship to their brain functioning.

   It seems that such an assessment might complement other diagnostic procedures which are used currently for SAD sufferers. These assessments might be helpful to clarify the unique pattern of SAD.

5. Future phenomenological research on a longitudinal basis may surface the co-researchers' perception of their condition. For example, it may show the relationship between the co-researcher's SAD condition and the impact of evolving family life stages. Or it may show the changing pattern of SAD itself, for example, from atypical depression to endogenous depression.

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APPENDIX A

Consent Form

Study on the family life experiences of patients suffering from SAD.

It is hoped that a greater understanding of SAD will be achieved by this research. Hopefully this will help in the development of more effective therapy for SAD patients.

There will be no inconveniences expected. The task for each participant will be to give one to three hours of their time (at their convenience) for an interview conducted by the researchers at the participant's home.

An overview of the research project will be present to the members of the group undergoing light therapy at the University of Alberta Hospitals. A request will be made for volunteers to participate in the research. Then from those who signed up to participate, an interview will be conducted and more complete information provided. Emphasis will be placed on the voluntary nature of the participation, the maintaining of confidentiality, and on freedom to withdraw from this study at any time.

Natalia Roob
Researcher

CONSENT FORM

I hereby consent to participate in the aforementioned study. I am aware that I may withdraw at any time without penalty.

______________________________	______________________________
(signature of participant)	(signature of witness)
______________________________	______________________________
______________________________	(Date)
(Address of participant)	
______________________________	
(Telephone of participant)	